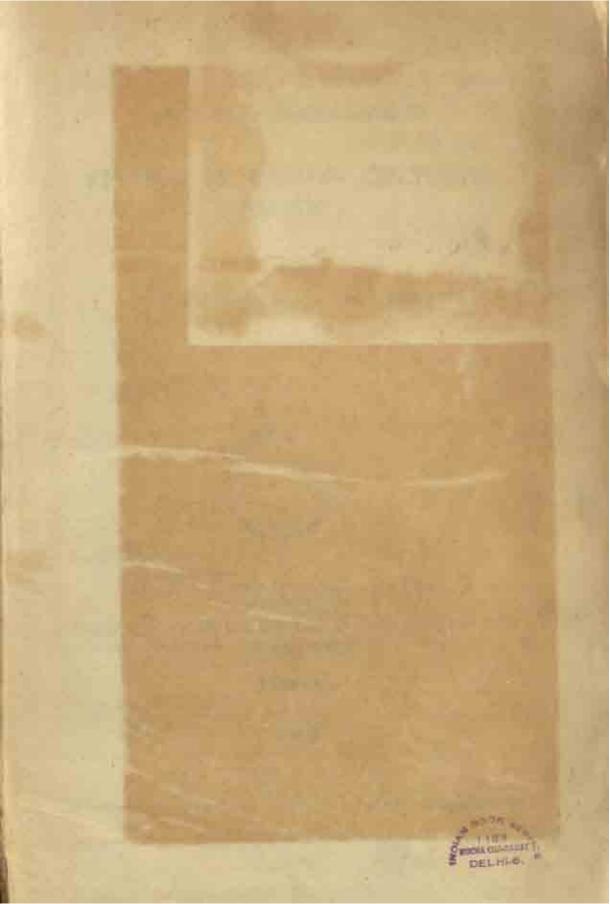
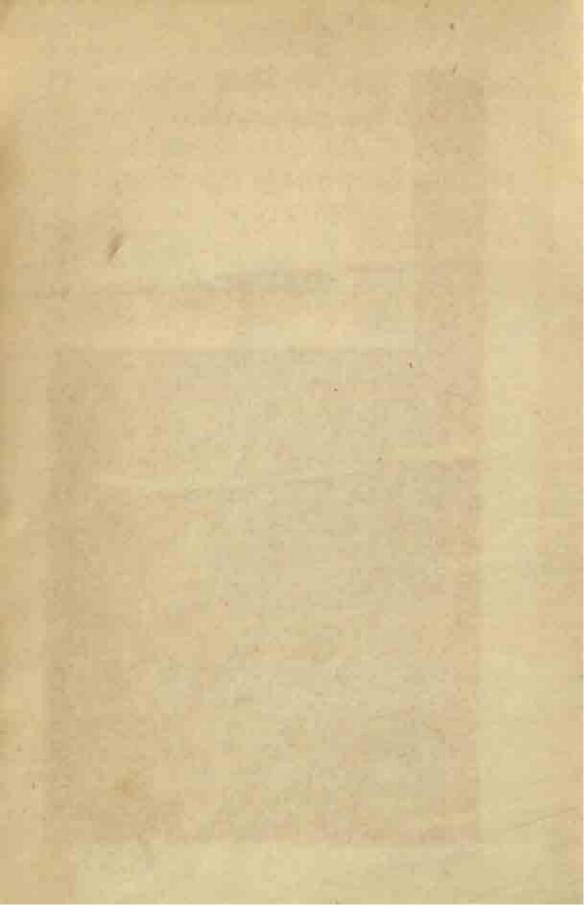
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Studies in Indian Literary Mistory

STUDIES IN INDIAN CULTURAL HISTORY

BY

Bandin Wyler III and

P. K. Gode, M. A., D. Litt. (Paris)



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FOREWORD

We have great pleasure in presenting to the world of scholars this fifth volume of Professor Dr. P. K. Gode's Collected works, the second in the Studies in Indian Cultural History, which is the second to be published by "Prof. P. K. Gode Collected Works Publication Committee." The genesis of the Committee and the necessary information about it and the list of contributors to the Publication Fund have been given in the third volume. Though the proceeds from the third volume were available to the Committee, but for the spontaneous voluntary donations from the following kind friends of Prof. Dr. Gode, the present volume could not have seen the light of the day so soon:—

Prof. K. K. Handiqui of Jorhat (Bs. 500/-) Shamaraj Bhalerso of Hyderabad (Rs. 200/-) The late Prafulla Chandra Bhanj Deb of Baripada

(Rs. 100/-).

On behalf of the Committee we offer our grateful thanks to these friends for their kind help in the cause of scholarship and learning.

The book contains 20 articles and covers 260 pages of the text. One article by Prof. R. T. S. Miller of the Wilson College, Bombay, on "The Nose-ring in the Old Testament" (No. 17) is included in this volume to give completeness to Dr. Gode's series of articles on "The Hindu Nose-ornament" (Nos. 12-16). The articles embrace literary, historical and cultural subjects, and, as usual, present all the data, both Indian and foreign, in every sphere bearing on the topic, in a thorough, precise and comprehensive manner, which characterises all writings of Prof. Gode. Different articles on the same topic have been presented in a serial order so that readers get a complete picture of the particular problem.

In these 19 articles by Prof. Gode are presented nine different series, dealing with fire—arms, mounted bowman, stirrup, sling, Bhavānī sword, Bhagvā Zeṇḍā, bullock—cart, nose-ornament or "nath", and Divall. The supreme importance of the articles on "Nose-ornament" (Nos. 12-16) which conclusively prove "that the nose-ornament makes its appearance in Indian history and culture about 1000 A. D. but not

earlier", in fixing the chronology of literary works in India will be evident to all students of Indian culture. The history of the Divall festival (Nos. 18-20) has been traced from A. D. 50 down to the present day, on the basis of literary sources - Sanskrit, Prakrit and regional languages-epigraphy, folklore, etc. Those interested in the history of war in India, ancient, medieval, and modern, will find valuable and interesting material in the articles dealing with fire-arms (Nos. 1-3), mounted bowman (No. 4), stirrup (No. 5) and sling (No. 6). There is an informative study of the prehistoric and Vedic ancestors of the Indian bullock-cart (No. 11) followed by a comparison of the carriage manufacture in Vedic India and ancient China (No. 12). Students of Maratha history will find fresh material from Sanskrit sources regarding the Bhavani sword (No. 7) and the Bhagva Zenda (No. 8).

On this happy occasion our special thanks are due to Puratativacharya Muni Jinavijayaji. Hon. Director of the Rajasthan Research Institute, who set the ball rolling by publishing two volumes of Prof. Gode's Studies in Indian Literary History, and this facilitated the work on further volumes. We are glad to state that the fourth volume is almost ready and will be published soon by Acharya Vishva Bandhu Shastri, Director of the Vishveshvarananda Vedic Research Institute, Hoshiarpur; and that through the kind benefaction of Prof. K. K. Handiqui, former Vice-Chancellor of the Gauhati University, the printing of the sixth volume has already started.

In conclusion, we wish Dr. Gode long life full of vigour and vitality so as to enable him to continue his literary activity in full force, as he has been doing all along.

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J. R. Gharpure
R. N. Dandekar
A. D. Pusalker
N. A. Gore

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PREFACE

I have great pleasure in presenting to the world of scholars this fifth Volume of my Studies, which is Vol. II of my Studies in Indian Cultural History or Vol. V of my collected Studies. The progress of the publication of my Studies will be clear from the following table :—

P. K. Gode Studies	Title	Publisher
Vol. I	Studies in Indian Literary History - Vol. I (Singhi Jain Series No. 87) 1953, pp. 570.	Bharatiya Vidya Bhavan, Bombay 7
Vol. II	Do - Vol. II (8. J. Series No. 38), 1954, pp. 560.	Do-
Vol. III	Do-Vol. III, 1956, pp. 270.	P. K. Gods Works Pub- lication Committee, Poons 4.
Vol. 1V	Studies in Indian Cultural History, Vol. I	V. Vedic Research In- stitute, Hoshiarpur.
Vol. V	Do - Vol. II, 1960, pp. 298	P. K. Gode Works Pub- lication Committee.
Vol. VI	Do - Vol. III (in Press)	Do-

A glance at the above table will show how the work of the publication of my Studies started by my revered friend Muni Shri Jinavijayaji (General Editor, Singhi Jain Series) ten years ago has borne abundant fruit owing to the good will and co-operation of brother-scholars and affectionate friends whose benefaction made it possible for me to bring out part III of my Studies-

Subsequently my affectionate friend Professor Vishva Bandhu Shastri, M. A., M. O. L., the Director of the V. Vedic Research Institute, Hosbiar-

^{*} See list of Contributors to the Prof. P. K. Gode Works Publication Fund printed in Vol. III.

pur (Panjab), whose high regard for learning and the learned is well known all over the world, offered to publish Vol. IV of my Studies and started its printing in the press of his Institute. This Volume of about 500 pp. will be out within a few months. The sale proceeds of Vol. III of my Studies realised in 1956 were not sufficient to finance Vol. V of my Studies immediately. Luckily I secured the following voluntary gifts from my affectionate friends for this Volume which made it possible for me to start the printing of this volume on the Dasara day (3rd October) 1957:-

Rs. 500/- from Prof. K. K. Handiqui, M. A. Jorhat (retired Vicechancellor of Gauhati university)

Rs. 200/- from Raja Shamraj Bhalerao of Hyderabad.

Rs. 100/- from Shri Prafulla Chandra Bhanj Deo, M. P. of Baripada (Orissa)

Rs. 800/-

I cannot adequately thank all these friends for their spontaneous donations and high regard for my humble work in the field of Indology. I have enjoyed the friendship of my learned friend Prof. Handiqui for over thirty five years. This friendship, which has now deepened into affection, enabled me to start the printing of Vol. VI of my Studies on the Dasara day 11th October, 1959, as he made a gift of Rs. 2100/- towards the printing of this Volume. I hope to bring out this Volume after about two years. Raja Shamraj of Hyderabad, whose intimate friendship I have enjoyed since my first meeting with him twenty five years ago, has a soft corner not only for books but also for their authors. In fact he has kept in bound Volumes a majority of my papers in his magnificent library at Hyderabad. His voluntary gift for the present Volume amply speaks for his love for me and my work. The late Shri Prafulla Chandra Bhani Deo M. P. of Baripada became my intimate friend in 1945 when he was studying at Cambridge under the guidance of my esteemed friend Dr. Bailey. He was a great lover of Sanskrit and was engaged in studying Sanskrit works on Tantra for many years prior to his unfortunate death two years ago. It is an irony of fate that he should pass away within a fortnight of his gift of Rs. 100 - towards the present Volume! I deeply mourn his loss as I found in him not only an ardent devotee of Sanskrit learning but also a loving friend with a sincere soul and a spirit of benefaction, which is most needed at present for the progress of research in this country.

The present Volume of my Studies in Indian Cultural History is being published by the Committee organised by my friends, Dr. A. D. Pusalker and Prof. N. A. Gore for the publication of my collected works. I owe to them a deep debt of gratitude not only for the fund they collected for the publication of Vol. III of my studies but also for the elaborate Indices they have provided to all my Volumes so far published. These Indices have enhanced the reference value of my Volumes. The labour of preparing these Indices is tremendous but it is a labour of love for which I cannot thank these friends adequately. Special thanks are due to Principal J. R. Gharpure, the Chairman of the Committee for his continued blessings for myself and my work and also to Dr. R. N. Dandekar (Treasurer) for his advice and co-operation in the editing and other matters pertaining to my volumes.

When Vol. VI of my Studies will be published after a year or so, a major part of my research output of about 4000 pages will be in a bookform. The publication of the papers not included in these Volumes will require about Rs. 20000/. If Providence comes to my help I may be able to bring out some volumes of these papers. In the meanwhile I have published a complete Bibliography of my 474 papers (1916-1959) in the P. K. Gode Commemoration Volume, edited by Dr. H. L. Harlyappa and Dr. M. M. Patkar and published by Dr. R. N. Sardesai, Proprietor, Oriental Book Agency, Poona, I take this opportunity to thank all these affectionate friends for their labour of love on this Volume. I have also to thank not only all the scholars in India and outside, who have contributed articles to this Volume but others who have helped me in my research work during the last 43 years.

In the correction of the proofs of the present volume I have received considerable help from my friends Shri. S. N. Savadi of the B. O. R. Institute, Dr. A. D. Pusalker and Prof. N. A. Gore. I convey to them my cordial thanks for this selfless friendly help and co-operation. I have to convey my hearty thanks to Shri M. S. Sathe, the Manager of the Prajin Press, Wai; and all the workers of this press for the neat and careful printing of this Volume.

Bhandarkar Oriental
Research Institute, Poons 4,
11th July 1960.

P. K. Gode

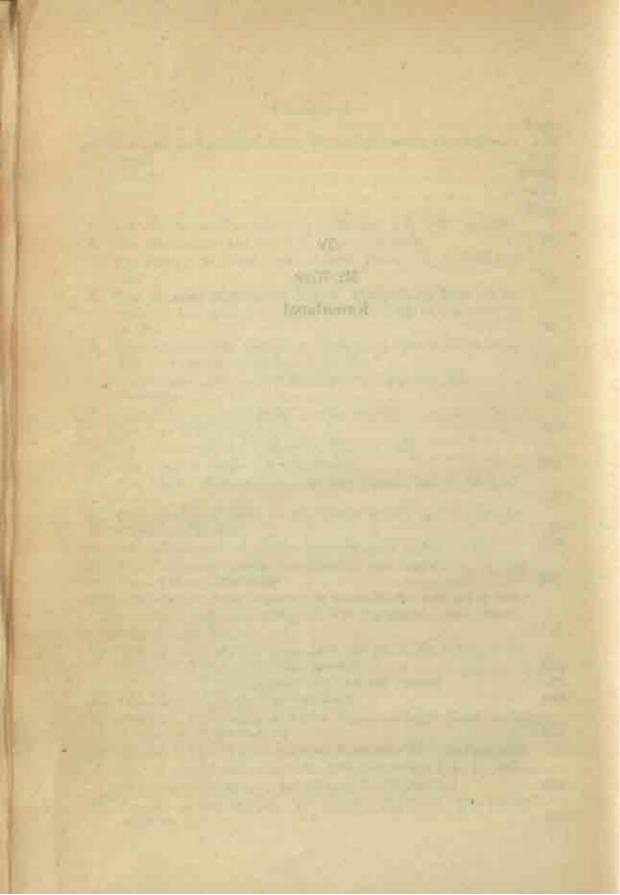
- Contents -

		ge
	Foreword by Prof. P. K. Gode Works Publication Committee	-ii
	Destant	iii
	Autinion	
	Indices 261-5	100
43	Pi	age
1.	Use of Guns and Gunpowder in India from A.D. 1400 onwards	-
2	The Hanufacture and Use of Fire-arms in India	10
8.	The History of Fire-works in India between A. D. 1400 and	-
m	1900	81
4.	The Mounted Bowman on Indian Battle-fields from the In-	
-	vasion of Alexander (B. C. 326) to the Battle of Panipat (A.	AMERICA
	D 1761)	57
5,	The History of the Stirrup in Indian and Foreign Horseman-	100
-	ship - between B. C. 852 and A. D. 1948	7 Ł
6.	The History of the Sling (Gophana) in India and other	
-	Countries	82
7.	Hari Kavi's Contribution to the Problem of the Bhavani	00
District Control	Sword of Shivaji the Great	92
8.	Pārijāta-dhvaja of the Maratha King Sambhāji	113
g.	The Bhagwa Zenda of the Marathas	120
10.	The Day Historia and Vadio Ance.	100
1	Store	123
11.	Carriage-Manufacture in the Vedic Period and in Ancient	129
YIII	Children by 1121 B. C.	142
12.	The Antiquity of the Hindoo Nose-ornament called "Nath"	120
18,	Two Religious Poems (in Marathi and Sanskrit) on the	161
D.	Hindon Nose-Ornaments	
14	References to Nose-ornament in Some Works ascribed to Sam-	
	karacarys and their Effect on the Authorship and Chrono-	167
21	logy of these Works	The state of
1.5	The Egyptian Nose-ring as described by E. W. Lane (A. D.	174
	1883-1835) and its Biblical Ancestry	177
16	. The Hindu Nose-Ornament - Its Past and Present	180
17	The Nose-ring in the Old Testament	100
18	Studies in the History of Hindu Festivals-Some Notes on the	187
	History of Divall Festival Studies in the History of Indian Festivals - The Sukhasuptika	- THE
19	9. Studies in the History of Indian Festivals - The Statissiphtal	
	of the Adityapurana and the Nilamatapurana (A. D. 500 -	228
	800) and its Relation to the Modern Divall Festival	220
0	0. Studies in the History of Indian Festivals - The Divali	239
	Festival	200

To

My WIFE

Kamalabai



1. Use of Guns and Gunpowder In India*

From A. D. 1400 Onwards.

Sir P. C. Ray in his History of Hindu Chemistry 1 has collected much valuable information about Gunpowder, Saltpetre and the Mineral Acids. In connection with the belief entertained in some quarters that the ancient Hindus had the knowledge of the art of manufacturing gunpowder he quotes a passage from Śukraniti 2 or the Elements of Polity of Sukracarya, containing mention of Agni-carna or fire-powder (gunpowder) and to Nalastra or gun, but concludes by the remarks that "Śukranīti is a patch-work in which portions of Chapter IV were added sometime after the introduction of gunpowder in Indian warfare during the Moslem period." 8

" वन्याणि आग्नेयीपधवलेन सीसकांस्यहपद्गोलपक्षेपकाणि लोहमपानि भाषायां नाल्याच्यामि-घेयानि तेषां सूत्रे सुचकं शास्त्रम्"

This is a description of iron guns. Aguepausadha = aguicūrņa = gunpowder (Vide Sabhaparvan, v. 21. Chitrashala Edition of the Makabharata, Poons, 1929, p. 17).

8. "Dr. R. L. MITRA, judging form the description of guns alons, concludes this portion to be spurious vide Notices of Sanskrit MSS, Vol. V, p. 185. "Vide p. 145 of "Chronology of Modern India (A. D. 1404-1884) by James BURGESS, London, 1913 :—

"A. D. 1702-Gunpowder first manufactured at Madras." Obviously this entry refers to the English manufacture of gunpowder at Madras. It would be queful to investigate and record references to the manufacture of gunpowder in India earlier than A. D. 1702 by either Moslems or Hindus between, say, 1400 and 1702 A. D. A Maratha in the employ of Tipu Sulian by name Shivaji Mahadeva has recorded some information about Tipu Sultan's army while at Kalmeri in the province of Kopal near Tungabbadus. According to this information Tipu manufactured guns for his army and ceased purchasing guns imported by the English.

("नन्या बंदुका करावयास कारलाने काविके आहेत. तेथे नन्या बंदुका तगार करवीत आहे. ईमबोकडील बंगेरे बंदरी बंदुका बेत नाहीं. " – Vide ऐतिहासिक टिपण – No. 22 (Pub. by PARASNIS to इतिहाससंग्रह, Jan. 1911).

The Penhwas purchased pieces of cannon from the English in December 1750. Ramaji Mahadeva was saked to purchase these pieces of cannon from the the English at Bombay weighing more than 20 seers (Pesh, Daftar Scientism, No. 45, p. 101):—

^{*} A Volume of Indian and Ironian Studies in honour of Sir Denison Ross ed. by S. M. Katre and P. K. Gode, 1989, pp. 117-124.

^{1.} Vol. I, Calcutta, 1902, pp. 95-108.

^{2.} Ed. by VIDYASAGARA, pp. 555-57, verses 201-211. Verse 202 mentions against a grant or gunpowder. National is mentioned in verses 203, 205, 210. Gold (lohamayal) or cannon-half is mentioned in verses 204, 209, 211. Laghanala or a gun with a light barrel is mentioned in v. 204. Nilakaniha Caturdhara, the commentator of the Mahahharata (between 1600-1700 A. D.) refers to make in the following passage;—

The above conclusion raises the question about the earliest reference to guns and gunpowder as also their use in Indian warfare. About this question Dr. P. C. RAY makes the following remarks:-

"The first record of the use of cannon and gunpowder in Indian warfare is in the Memoirs of Baber. In 1528 he forced the passage of the Ganges near Kanauj with the aid of artillery. 1 "

Let us now record some authentic references to the invention and use of gunpowder and guns in the European records. According to Encyclopaedia Britannica? " we have authentic information of guns in France in 1838 and in Florence in 1826 and that the Oxford MS De Officia Regum of 1325 gives an illustration of a gun." This information clearly proves that Baber's use of guns and gunpowder in 1528 in his Indian warfare is about 200 years after their invention in Europe about 1825.

We are concerned in this paper with the earliest reference to the use of guns and gunpowder in the Indian warfare by Moslems or their enemies.

The Ras Mala states that Mahomood Begurra, the celebrated Mahommedan king of Gujarat in his fight against the pirates of Bulsar used a force consisting of Musketeers and gunners about a. D. 1482.4 He also cannonaded the city of Champaner according to the Muhammadan account of the fall of Champaner recorded in the Ras Maia. 5

In Pesh. Daft. No 39, Latter 70 of 6-9-1766 repair to guns and manufacture of ammunition is mentioned,

- 1. Vide article on early Asiatic fire-weapons by Maj. Gen. R. MACLAGAN in the Journ, As. Sec. Bengal. Vol. XLV, pp. 30 ff.
 - 2. Fourteenth Edition, 1929, Vol. II, p. S.
- S. This book is also known as the Hindeo Annals of the Province of Gujarat by A. D. FORBES, founder of the Porhes Goozerathi Sabha, Bombay. (Born July 1821 and died at Poous on Blat August 1865).
 - 4. Ihid., p. 283.
- 5. Did., p. 288. Vids also p. 63 BRIGGS : Ferinita (History of the Rise of the Mahomedan Power in India Mil A.D. 1812) Calcutta, 1910, Vol. IV, p. 65. BRIGGS semarks about the use of musketeers in the siege of Champaner as follows:-
- "This is the first mention of artillery and musketry in the General history. They were probably introduced by the Araba and Turks from the Red Sea and Gulf of Persia, " p. 69. Use of a shell against Raja Beny Ray's palace in the slege of Champaner is mantioned. BRIGGS' note on the word shell reads :-

[&]quot; तोफाने क्यार केंद्रे आहेत तरी वीस सेरापासून वर्ते असतील ते वेणें, "

[&]quot;The word is looks. The use of shells at this early period is remarkable, although it is mentioned that the Mosleme employed granadous in their ships at the time the Portuguess renchal India."

In the history of the Vijayanagar kings we find references to pyrotechny1 in which gunpowder may possibly have been used.

In the historical poem Kanthiravanarasarājavijayam² composed in A. D. 1648 we have references to guns (pirangi) carried on carts together with thousands of bags of gunpowder taken with the army in the expedition of Rapadullakhan against the king of the Karnatak and his feudatories.

In a work called the Yavanaparipāţi-anukrama composed by Dalapatirāya under his patron Mādhavasimha about a.D. 1764 we have the draft of a letter to be addressed by the king to the officer in charge of the king's artillery called Analādhyakṣa ordering him to make the artillery ready for action. This draft as given in the Yāvanaparipāṭi-anukrama makes interesting reading and hence may be reproduced from MS No. 409 of 1882-83 in the Govt. MSS Library at the B. O. R. Institute, Poona:—
Folio 10—

" अनलाध्यक्षं प्रति चंत्रशासा सजीकरणाय राजः ॥ पत्रं ॥ शौर्यवैयंतिघेश्वरनीकसत्ता-दिदक्षया निर्यास्याम इति भवात् स्वनियोगे समबद्धितः ॥ सपताकबद्धिवाणस्तः पदात्तिनः करमांश्व छंबछटानां लघुनालिकानां शतकातार्द्धनालिकानां च मुचा निसर्गसुद्धानां विद्वारवासानां शकटिका गुलिकांगारच्यांदवरिकागुरूष्टरकंददंबपताकायुगनिसर्गशिक्षित्वसारधिमुकूपमकलितानासीरे प्रथमेंद्व-ध्वतमजानुगामितया नियोजयतु ॥ द्वितीयद्वध्वज्ञकारणमुष्ट्रनालिका इयनालिका गत्रनालिकाश्च निज-निजोपस्करस्यजाः स्वयमिष स्वधिमाः समझाइतुरगिमेटैः परिवृतो वर्मास्वस्त् स्वाधिकारित्युक्तपरि-वनयुक्तोनुत्वस्तु किं बहुना समुचितक्षे ॥ "

From the above passage we get some Sanskrit equivalents of terms denoting the artillery and its equipment. Yantraśalā is evidently the place or building where the guns and their accessories were stored.

I. The following references to the use of fireworks at Vijayanagar is noteworthy: A. D. 1442. Abdur Rassiq, the ambassador from the Court of Sultan Shah Rukh who stayed in Vijayanagar from end of April A. D. 1443 till the 5th of December A. D. 1443 during the reign of Decardys II mentions the use of parotechny in the Mahassacami feetical (See Elliot His. of India, IV. pp. 117-118). Perhaps in the parotechny referred to above gunpowder may have been used. According to Sir P. C. Ray (His. of Hindu Chemistry Vol. I, p. 100 f. n. 4). "Saltpatre has been in use from time immemorial as the basis of Rocket and other fireworks both in China and India."

Sieg-carifra-erita Samgraba (Khanda I-Kanadi Vibbiga) B. I. S. Mandal, Poona, 1938, p. 4. The author of the poem Kanthlrausacrasarajarijanum is Govinda Vaidya. He was a resident of Srirangepattan and a court-poet of the Mysore kings. He wrote this poem at the instance of Nanjarajendra, the general of Kanthuranarasaraya in the Saka year 1670 (Sarradhari Samushara) = A.D. 1648. He was a Smarta Brahmin, well versed in Samisrii and Kanarese languages. His patron, K. Narasaraja ruled from A.D. 1688-1609.

³ Vide Dr. M. M. PATRAR's article in IHQ, XIV, No. 1, pp. 158-57.

Gulikangara Curna means gunpowder and reminds us of the term agnicurna mentioned in the Sukraniti as we have seen above. We further get the terms ustranalika meaning portable guns carried on camel's back, hayanalika, those carried on horse-back, and gajanalika, those carried on the back of elephant.

It appears that the term nalika had become current since the importation of guns into India as we find the usage of the term in the above passage from a work of the 18th century. I shall now quote a passage from a 17th century poem called Sambhurajacarita composed by Harikavi alias Bhānubhatta in a.d. 1685. The poet describes in the following stanzas of the Sambhurajacarita (MS No. 191 of 1875-76) folio 71s the thundering of guns on the battlefield, where Sambhaji, the son of Shivaji the Great, is shown as being surrounded by the army of the enemy:—

" ततः समभवद्भवः प्रदृतसृतिभेतीभवः सुतालनिमनालिकागढगढारवञ्चाजितः । विकोलितमहीतको बद्दलगर्जिताश्रस्थलो निमाद इव मधनः कुलिशासवसंताजितः ॥ २८ ॥ "

Folio 72b-

" सदास्वरसंस्तां बहळनाळिकासंकुळां सकंकठमठोद्धारा प्रबळकुंजराभेसरां । रणोद्धततुरंगमोद्धमतरंगरंगोत्तरां चकवं परवाद्दिनी प्रविवरूपिनीं स्वां ततः ॥ ७१ ॥ "

Folio 92-

" ततो नृपतिसैन्यतो बह्छनालिकावक्त्रतो सहारविदारितश्रवणमस्तका निर्येषौ । सुगोलकतिश्रवसुमणिमालिकेबोद्रता रिपुत्रवपताकिनी सपदि निर्देहेती हठात् ॥ ९५ ॥ "

Verse 91 quoted above contains a good description of the series of cannon-balls (sugolakatati) issuing from the mouths of cannons (nali-kānaktratahudgatā) and looking like a row of suns, destroying the army of the enemy.

From the 17th century we shall now go to the 16th century and quote a passage from a Sanskrit poem, called the Rastrandhavamiamahā-kavya² composed by a Dākṣinātya poet of the name Rudrakavi at the court of the Bāgalān king Nārāyaṇa Shah in A.D. 1596. In Chapter XX, v. 52

L Vide my paper on Hari Kavi, Annals, Vol XVI. pp. 262-291.

^{2.} Gailand Ovi. Series No. V. Baroda, 1917.

we have the following description of red-hot connon-balls issuing from the mouths of guns :--

" शितवर्गरेरपछरच नाळिकाविनिहतज्बळदायसगोळकैः । मिळितयोरुभयोरय सेनयोः प्रवकृते समरस्तुमुळस्तयोः ॥ ५२ ॥ "

It appears from the above verse of a.p. 1596 that the iron cannon-ball (āyasagolakaih) with which the gun was charged (nālikāvinihata) contained within it sharp arrows (sitasaraih) and stones or gravel (npalaih). This description finds its analogue in Nilakantha Caturdhara's description of guns in the latter part of the 17th century in which he describes guns as machines (yantrāņi) made of iron (lohamayāni) and capable of throwing away (prakṣepakāṇi) by the force of gunpowder (āgneyanṣaihabalana) balls of lead (sīsa), bell-metal (kāṃnya) and stones (drṣadgola).

A further reference to nalikā is found in a work called the Akāśa-bhairavatantra 1 which appears to have been composed during the prosperous days of the Vijayanagar Empire, most probably before a.D. 1550. In the 60th chapter of this encyclopaedic work the king is advised to worship 32 weapons on a particular day. Among these weapons nalikā is mentioned as No. 23:—

Folio 189 (of B. O. R. I. MS No. 43 of 1925-26).

"Trayovimiam nalikastram svastikam tadanantaram"

As Abdul Razzāq, who visited the Vijayanagar Court in a.D. 1443 mentions the use of pyrotechny at the Mahānavamī festival, the use of gunpowder appears to have been current in the Vijayanagar Empire about the middle of the 15th Century and this fact would justify our interpretation that the expression "nalikāstra" in the above passage means a gun and nothing else, especially in view of the reference to musketeers and gunners about a.D. 1482 used by Mahmood Begurra in cannonading the city of Champaner.

In the Deccan also the use of gunpowder appears to have been introduced about 10 years earlier than that made in the siege of Champaner in 1482 a.D. Mahmud Gawan during his second campaign against Belgam in a.D. 1472 made use of mines successfully to make a breach in the walls of

^{1.} In a paper submitted by me to the Karaatak Historical Conference (May 1928) I have proved that the work called the Akaésbhalrayatantra (MS No. 43 of 1925-26 in the Govt. MSS Library at the B. O. R. Institute) has nothing to do with Tantra, but that it is a work dealing with the inner life of the kings of Vijayanagar in elaborate detail and hearing on all its aspectacivil, religious, political and cultural. The original of this copy is in the Tanjors MSS Library.

the fort. The account of this campaign1 given to us by Prof. Shenwant on the authority of Burhanu i-ma'athir2 and Ferishta3 reads as follows :-" Second campaign; Belgam-1472: The Khwajah informs the King that Parketah of Belgam and the chief of Bankapur want to raise an insurrection and invade Gos and offers to lead the expedition himself, but His Majesty decides to command the expedition in person and orders a vast army to be collected at the capital. Immediately when everything is ready he marches direct to Belgam, a fortress of great strength, surrounded by a deep moat full of water. Besieging the place he orders that the moat should be filled up with rubble and wood in order to facilitate the entry of the royal army when time comes; but the Khwajah's work to that end in the day is frustrated by the Rai's men during the night as they clear the most of the rubble under cover of darkness. On this the whole strategy is changed and mines are laid under the wall of the fort under cover of a new wall erected parallel to the former and as this laying of mines is entirely a new thing in the Deccan, the Rai is not aware of the significance of the new walls being created. Anyhow three mines, those from the posts of the Khwajah Yusuf 'Adil Khan and Fat-hu'llah " Imadu'lmulk burst open the wall and breaches are effected. "

As stated in the above account the laying of mines for bursting open the walls of forts was a new thing in the Deccan in a.D. 1472. The use of mines presumes the importation of gunpowder or its manufacture in India, if such manufacture could be proved to have been carried out in the 15th century in Gujarat, Deccan and at the Vijayanagar court.

From a.D. 1472 we now go to a.D. 1405, when gans were available in Bengal according to an account of Mahaun, a Chinaman who visited Bengal at that time and who was attached as an interpreter to the suite

Vide pp. 103ff. of the Journal of Indian History, Madras, Vol. XVI. Article by Prof. H. K. SHERWANI on " Mahmud Gawan's Campaigns in the Mahamahira."

Il Published by the Persian Teris Society, Hydersbad (Decoau). It contains a number of diplomatic letters to the kings of Gujarat and Janupur as well as to the rulers of Turkey. Persia, Hirát etc.

Ferishta's History of India was written at Bijapur in the time of Ibrahim Adilshah II (1879-1826).

^{4.} Vide JRAS 1895, Mahaun's Account of the Kingdom of Bengals (Bengal) by Geo. PHILIPS, pp. 522ff. Cheng Ho was ordered to go on the expedition in the 6th month of the year 1405. The party visited Cookin China, Straits and India and gave presents to the princes and chiefs. Mahaun has given us an account of 90 kingdoms visited by the expedition. Mahaun's Transels are just like those of Marco Polo, Friar Odoric and Ibn Battuta. Mahaun's book contains also in account of Calicut, Ormus, Aden, the Makitives and many other places in the Indian Ocean.

of Cheng Ho, sent by the Chinese Emperor, Yung-lo with a party of 30,000 soldiers in a fleet of 62 ships to the various kingdoms of the Western Ocean in order to show that China was rich and strong. Mahaun describes the language of the people as Bengāli and states that Persian also was spoken in Bengal. He states that "not having any tea they offer their guests the betel nut in its place, "He further records: "The mulberry tree and silk worms are found there. Silk handkerchiefs and caps embroidered with gold, painted ware, hasins, cups, steel, Guns, knives and scissors are all to be had there. They manufacture a white paper from the bark of a tree, which is smooth and glossy like a deer's skin."

The reference to "Guns" in the above extract is very important as it proves that guns were to be seen in Bengal about 1406 a.D. when Mahaun visited the country. This reference, therefore, takes the antiquity of Guns in India and consequently of gunpowder upto say 1400 a.D. I shall feel grateful if any scholar publishes references to Guns or gunpowder in Indian literature earlier than a.D. 1400.

I shall now summarize in chronological order the references to guns, gunpowder, mines, etc. recorded by me, in the following lines:—

European References

A. D. 1325 - Picture of a gun in an Oxford MS.

A.D. 1826 - Guns in France and Florence.

Indian References

- A.D. 1406 References to "guas" in Bengal by Mahaun, a Chinese Interpreter.
- A.D. 1443 "Pyrotechny" at Vijayanagar Court mentioned by Abdul Razzaq.
- a.D. 1472 Use of "mines" at the siege of Belgam in the Deccan (for the first time) by Mahmud Gawan.
- A.D. 1482 A force of musketeers and gunners at the siege of the fort of Champaner by Mahmud Begda.
- A. D. 1528 Baber's use of cannon and gunpowder near Kanauj.
- A.D. 1596 Nalikā = Gun, mentioned by Rudrakavi, the Court-poet of Nārāyan Shah of Bāglan.
- A.D. 1648 References to guns carried on carts together with bags of gunpowder by Govinda Vaidya.
- A.D. 1685 Hari Kavi's description of guns (=nalika) and gunfire in the Sambhurajacarita.

A. D. 1764 — Dalapatirāya's Sanskrit draft of a letter to be addressed by a king to his analādhyakşa or the officer-in-charge of artillery to keep the yantraśālā ready for action.

I believe the above references would be found sufficiently authentic and instructive as they take the antiquity of the use of guns and gunpowder in India upto, say, 1400 A. D. I shall be happy to know from veteran researchers any references to guns and gunpowder as used in India between A.D. 1300 and 1400.

P. S.—Since this article was sent to the press I have been able to note a few more references to Guns. These are as follows:—

- (1) Three iron Guns bearing inscriptions and recording the names of Fāruqi Kings Mubārik and Adil Shāh. One is dated 1554-5 A.D. while another is dated possibly 1589 A.D. (Vide p. 73 of Inscriptions in C. P. and Berar by Hiba Lal, Nagpur, 1916). Item 102—Khandwa Gun Inscriptions—Item 94 on p. 68— Asirgadh Gun Inscriptions (a bronze gun made at Burhanpur in A.D. 1663 and another in A.D. 1664.)
- (2) Barbosa (A.D. 1515) refers to riders of elephants with bows, arrows and handguns (Vide p. 259 of History of Gujarat by Commissa-BIAT, Vol. I, 1938).
- (3) The Campūbhārata of Anantakavi (c. 1500 A.D.) describes gunfire as follows (Stabaka III, v. 54 p. 113 of N. S. Press Edition, Bombay, 1903):—

" कालाम्बुरासिनखिकाक्षणदीसिवत्याँ संबुक्षितास्सपदि सम्बन्ति निःसरितः । वर्षादमसीसगुविकानिकरैः कटोरै-वर्षाभियातिमवधीदनकाल बोवः ॥ ५४ ॥ "

- (4) Prof. Ramanayya (Vide p. 129 of Vijayanagar: Third Dynasty) states that the Vijayanagar army was weak in artillery, which comprised a corps of musketeers and several cannon. The Mussalmans made use of artillery fully with the help of Turkish gunners trained in European wars.
- (5) Sir E. Denison Ross (Arabic History of Gujarat, 1928) refers to guns (p. 220), shot and ball (p. 453), broken gun-carriage (p. 497), five hundred brass guns in the army of Gujarat (p. 568), 12000 muskets in Gujarat, etc.
- (6) On November 1, 1526 Baber witnessed the casting of a gun by Ustad Ali Kuli (Vide pp. 848-844 of Mamoirs of Baber by ERSKINE, London, 1826).

- (7) In the Rabari Songs of Kathiawar recorded by B. L. MANKAD, p. 66 of Bombay Univ. Jour. VII (New Series) Pt. IV, we find a reference to guns in connection with a marriage party:—
- "Drums are beaten and guns are fired as the bride-groom's marriage party starts from the house of the bride."
- (8) Principal Dr. Balkrishna sometime ago published an article on Fire arms in the Mahābhārata in the Rajaram College Magazine called the Rajaramian. Dr. V. S. Sukhthankar has shown to me a reprint of it but I have not examined the views of Dr. Balkrishna stated in this article.
- (9) About Saltpetre, vide pp. 66-67 of The Travels of John Albert de Mandelso from Persia into East Indies (Liondon, 1669). Sir P. C. Ray regards this as the earliest account of Saltpetre on a commercial scale, (vide Hindu Chemistry I, p. 100). Regarding Transport of Saltpetre in India in the Seventeenth Century by Land and Sea, vide Jour. of Beh. and Orissa Res. Society, XXV, Pt. I (March, 1989)—article by J. N. Sarkab, Feb. 6th, 1627—about Rs. 2,500 were exacted from the English factories at Surat as taxes on Saltpetre and Sugar conveyed by a caravan.

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2. The Manufacture and Use of Fire-arms In India between A. D. 1450 and 1850 *

In my paper on the "Use of Guns and Gun-powder in India from A. D. 1400 onwards" contributed to the Sir E. Denison Ross Volume (pages 117-124), I have recorded a few references on this subject, which clarify to some extent the history and chronology of the use of guns and gun-powder in India. I propose in this paper to record some more data bearing on the subject, which, it is hoped, will be useful to scholars who intend to write on the history of fire-arms in India and allied topics.

(1) RAM CHANDRA KAK in his Ancient Monuments of Kashmir (London, 1933) records the political history of Kashmir. In his account of the reign of Zain-ul-Abidin (A. D. 1421-1472) he gives us the following information about fireworks and fire arms:-

(a) Page 36—"The King (Zain-ul-Abidin) himself composed two works in Persian, the first being a treatise in the form of questions and answers on the manufacture of Fire-works and the second entitled Shikayat (the Plaint) a poem, etc."

(b) Page 38—" He gave a strong impetus to the Manufacture of paper, shawls, and embroidered tapestry, for which Kashmir has always been famous. He promoted the silk industry by inviting weavers from Khurasan and settling them in the country. It was in his reign, in the year A. D. 1466 that firearms were first introduced in Kashmir."

The above references to fire-works and fire arms are in harmony with the references to guns and gun-powder in India from A. D. 1400 onwards recorded by me in my paper referred to above.

(2) In the Catalogue of Venetian Coins in the Madras Government Museum (Madras, 1938) Mr. T. G. Arayamuthan has recorded some information about the professions of the Italians in India in the 16th and 17th centuries. In this information I find the following references to Italian Artillary makers:—

Page 22 - "A Milanese gunner who died in Lahore in 1597" left

"all his books to the (Jesuit) fathers (of the mission to
the Mogul Country) including some technical works on
the founding of Cannon and on Siege operations." (See

^{*} Bharatiya Vidya, Vol. IX (Munshi Volume), pp. 201 ff.

page 192 of Maclagan's Jesuits and the Great Mogul, London, 1932).

- Page 26 Among three or four Christians employed at Agra in A. D. 1632 there was one Venetian Angelo Gradenigo, employed by Jehangir in his court as cook and probably as maker of artillery (Mundy, ii, 208, n. 3).
- Page 27 Niccolao Manucci, a Venetian, who reached India in 1656
 A. D., entered services as an artillery-man under Dara Shukoh. He became Captain of Artillery to (Mirza)
 Raja Jaising of Amber, marched to the Dekhan and saw Shivaji in 1665. He died about 1720 (See Intro. p. 67 to Storia do Mogor, Translation by W. Erwine, London, 1907-1908).

Sometime before A. D. 1672, among the thousand brass and iron pieces of great Cannon mounted on the walls and gates of Bijapur, there was one carrying not less than 540 pound weight of gun-powder cast by a native of Rome, who when questioned by one of the king's Commissioners about the money he had disbursed upon this account, threw him into the same hole where he had cast the cannon before. (vide p. 602 of Baldaeus P.—A True and Exact Description of the most celebrated East India Coasts of Malbar and Coromandel — Trans. Vo III — London, 1703).

- Page 29 Petro Paulo, who worked as a Carmelite friar in India, wrote to Manucci in A. D. 1680 that "he knew about a Match lock that could be fired five to seven times after only once loading it, and whenever he chose to do so." (See Manucci, IV, 112-3).
- Page 31 About A. D. 1625 "Handsome musket barrels wrought with gold and set with agates of various colours in which heads are carved were also brought here overland by the Venetians." (Vide p. 26 of Pelsaert's Travels—Trans. by W. A. Moreland).
- (8) Dr. J. B. Chaudhuri records the following verses of a Sanskrit poetess Gauri, which describe a weapon called gauri (Vide p. 9 of Sanskrit Poetesses Vol. II, Part A, Calcutta, 1939):—
 - (1) " महाचण्डीय संभाति भुशण्डी भवतः करे। प्रवापञ्चरसंभातगोलिका जीवहारिणी ॥ ४॥ "

"(O, King!) the BhusandI — the destroyer of beings and filled with cannon balls, that are shining with

brilliant prowess,—is shining in your hand like the great goddess of destruction. "

(2) "बन्दिच्नंपरिपूर्णनिजान्त— सौतिका गरङवक्त्रविकामा ॥ बाहुसीपणसुजङ्गस्तेयं भाति दुष्टसुजगीव सुझण्डी ॥ ५ ॥ "

"With its yawning mouth, poisonous by reason of the cannon balls that are filled with fiery powder this Bhusandi shines (in the hand of the King) just like a malignant snake (shining in the hand of one (i. e. Siva) who wears dreadful snakes on his arms."

It appears from the two verses of Gauri quoted above that the weapon "Bhuśandi" in the hand of the King is either a musket or a small portable piece of Cannon. As Gauri is quoted by Venidatta (A. D. 1644) we may conclude that she is earlier than about A. D. 1625. According Dr. Chaudhuri the lower limit of her date is 17th Century A. D. (See p. IX of the Intro.). As Gauri mentions fire-arms we may safely infer that she is later than about 1400 A. D. We may tentatively fix her date between A. D. 1400 and 1600.

(4) Saint Tukarama of Maharastra possibly refers to bullets or Cannon-balls (गोडवा) in the following extract;—

> "देव राखे तया मारील कोण तुका म्हणे नारायण । येता रोक्त्या वारी वाण ॥ ४ ॥ "

(Abhanga No. 2927 in तुकासम-गावा, Bombay.)

Tukārāma flourished between A. D. 1608 and 1649.

(5) Raghunātha Pandita in his Rājavyavahāra Koša composed by the order of Shivaji the Great about A. D. 1676 refers to the terminology about fire-arms in the Sastravarga (verses 129—181) as follows:-

" यन्त्रस्पृहस्त्वरावा स्पाद वाणोऽनित्ततिका भवेत् ॥ १२९ ॥ वाळिकं वरसेटाने मळीयन्त्रे तु बन्दुस्तम् ॥ सोफ नाम भवेदुस्का दास नामाग्निप्णेकम् ॥ १६० ॥ कपुवन्त्रे अवर्षेने अस्त्वरा तु शतक्षिका ॥ दीक्षिनीकं भवेत् कामा गोलंदाज् चन्त्रवेधकः ॥ १६९ ॥ " (Vide p. 155 of शिवचरित्रप्रदीप, Poons, 1925)

In the above extract the terms बराबा, बाज, बरखंदाज, बन्दुख, सेफ, दारू, जबर्बन, जम्बूट, काला, and मोलंदाज are either Persian or Arabic. Their Sanskrit equivalents have been given by Raghunatha Pandita. (6) Bernier in his Travels (A. D. 1656) has recorded many observations about the artillery of Aurangzeb and that of the Mogol army (See Constable's edition of Travels, London, 1891). I note below some points from these remarks:—

Page 217:— Musketeers squat on the ground and rest their muskets on a wooden fork which hangs to them—afraid of an evil spirit causing the bursting of their musket, which may burn their eyes and long beards—Monthly pay of musketeers is Rs. 20, 15 and 10—Artillery men receive great pay. Particularly all the Franguis or Christians, Portuguese, Dutch, Germans, and French; fugitives from Goa, and from the Dutch and English Companies. Formerly when the Mogols were little skilled in the management of artillery, the pay of the Europeans was more liberal and there are still some remaining who receive Rs. 200/—a month; but now the King admits them with difficulty into the service and limits their pay to Rs. 32/—

Two Kinds of Artillery :- (1) Heavy and light or Artillery of the Stirrap.

Heavy artillery: - 70 pieces of cannon, mostly of brass, 200/200 camels, each carrying a field piece of the size of a double musket attached on the back of the camel.

Page 218: - Artillery of the Stirrup :-

50 or 60 field pieces of brass, each mounted on a well-made and handsomely painted carriage, with a ammunition chests, one behind and another in front, and ornamented with a variety of red streamers. The carriage, with the driver was drawn by 2 fine horses and attended by a third horse, led by an assistant driver as a relay.

The heavy Artillery could not move along difficult passes or cross the bridges of boats thrown over the rivers. The light Artillery is always intended to be near the King's person and on that account takes the name of the Artillery of the Stirrup.—When the king arrives at any place of encampment, the guns ranged already in front of the King's quarters fire a volley by way of signal to the army.

Page 219: Infantry - About 15,000 in the army immediately about the King, including Musketeers, foot Artillery, etc.

Page 352:— The heavy Artillery consists of 70 pieces mostly of brass.

Many of these cannon are so ponderous that 20 yoke of oxen are necessary to draw them along and some, when the road is steep or rugged, require the aid of elephants in addition to the oxen, to push the carriage wheels with their heads and trunks.

Page 277 .- Description of an elephant fight --

Use of Charkys (or fire-works) to separate fighting elephants—the elephants have a particular dread of fire; they have been used with very little advantage in armies since the use of fire-arms—The boldest elephants come from Ceylon but those only, that are accustomed for years to the discharge of muskets close to their heads and the bursting of Crackers between their legs, are employed in war.

(Charkhi or a wheel on the end of a stick is a common fire-work in Northern India).1

(7) Abul Fazi in his Ain-i-Akbari (C. A. D. 1590) makes the following remarks about Artillery of Emperor Akbar (Vide pp. 91-95 of Gladwin's Trans. Vol. I. Calcutta, 1897):—

"The Artillery-These are the locks and keys of empire; and excepting Room, no Kingdom can compare with this in the number and variety of its ordnance.

Some pieces of cannon are so large as to carry a ball of twelve Maunds; and others require each several elephants and a thousand bullocks for their transportation.

His Majesty gives a great deal of attention to this department, and has appointed to it Daroghahs and Clerks.

He has invented several kinds, some of which are so contrived as to take to pieces for the convenience of carriage, and when the army halts they are nicely put together again. Also seventeen pieces are so united as to be discharged by one match. There are others which can be easily trans-

^{1.} Bernise refers to "Bannes" (Bana or rocket) on p. 48 of the Travels, used for frightening the horses in the battle. He explains "bannes" as a "sort of granude attached to a stick." I shall study in a separate paper the usage of the term Bana (AD) as applied to a fire-work or fire-work, any between A. D. 1850 and 1850. It is for linguists to say whether the sense of "fire-work" or "fire-arm" has been grafted on the Sanskrit word "app" which means an arrow.

ported by one elephant and they are called "Gujnal." Others can be carried by a single man and are called Nurnal.

It has been wisely ordered that a sufficient train of artillery be placed in each Subah.

The cannon for battery, and boats and those, which are fit for journies are kept separate. It would be impossible to innumerate them; and skilful artists are continually making new ones especially Gujnals and Nurnals.

In this department Omrahs and Ahdyan receive large salaries. Rules observed in making fire arms for his Majesty's use :--

Bundooks (i. e. match-locks) are now made in such a manner that when filled with powder up to the muzzle there is no fear of their bursting. Formerly, they never were of more than four folds of iron: and sometimes only of one, joined together by the two extremities of the breadth, and which were very dangerous. His Majesty after having the iron flattened, has it rolled up like a scroll of paper but slantingly and every fold is passed through the fire. There is also the following method:—Solid pieces of iron are properly tempered and then bored with iron borer and three or four of these are joined together to form a Bundook. The smallest Bundooks that are made are two spans long and the longest near two ells. That of one ell and a quarter is called Demanik and its stock is made differently from the others. Some are made to fire without a match, merely by giving a little motion to the trigger. And they make some balls that will do execution like a sword.

There are a great number of skilful artists in this department, the chief of whom are Ostad Kebeer and Hussain. In preparing the iron for Bundooks half is lost in the fire. When the lengths are made and before they are joined together they are stamped with figures, expressing the quantity of crude iron and the quantity remaining; and in this state it is called Dowl. This is sent for His Majesty's inspection and the weight of the ball being determined, the bore is made accordingly. The Bundook ball is never larger than twenty five Tanks nor less than fifteen; but excepting His Majesty no body is bold enough to fire off one of the largest. When the bore is finished it is again carried to the Harem. From thence it is brought out again, and set in an old stock and filled with powder till within a third of the muzzle. If it stands this proof it is carried again to his Majesty. Then the muzzle is finished, after which it is again put into an old stock as before mentioned, and tried at a mark. If it does not carry true, they heat it and straighten it by means of a wooden rod. Then

in the royal presence it is delivered to the filer, who fashions the outside as he is directed. When this is done, the barrel is again carried to His Majesty, when the wood and form of the stock are determined. In this stage the figures, marking the weight of the crude and of the prepared iron, are effaced, and in their room are engraven the maker's name, the place, the month and the year. Next are made the trigger, the rameod and primer. After all these are finished, the piece is again ordered to be proved. If it is found to carry true, it is again brought to the Harem along with five balls. In this state it is called Sudeh (or plain). The colour of the barrel and stock is next determined and when the colouring is finished, it is called Rungeen (or coloured). It is now sent again into the Harem with five more balls. His Majesty fires it four times and returns it back again with the fifth ball. When ten of these Rungeen muskets are collected together they are ordered to be inlaid with gold and are afterwards sent to the Harem as before described. And when ten such are completely finished, they are committed to the care of Cheeyleh.

A description of the Barghu:—Formerly it required a great many men, with a number of iron tools to polish the Bundooks; but His Majesty has invented a wheel, which is turned by a single bullock and polishes sixteen muskets in a very short time.

Of the ranks of the Royal Bundooks :-

Bundooks are either made in the royal workshops or are bought or are received in present. His Majesty out of a thousand of those of different kinds selects one hundred and five for his own particular use, which are used in the following manner:—viz. twelve are named after the months and are brought to him alternately, so that each comes in use once a year; thirty others are changed every week; and thirty-two are used alternately every day of a solar month; and the remaining thirty-two are for the Kowtel. His Majesty fires every day, and after he has discharged a piece four times, it is sent out and exchanged for another.

It is also a rule that the clerks of the Chase take an account of all the game that is shot by His Majesty and with what particular piece, from whence it appears that with the musket called Sungram, which is the first in rank of the Khaseh muskets and appropriated for the month of Ferverdin (i. e. March), there have been killed one thousand one hundred game of various kinds.

The pay of the Bundoakchyan :-

His Majesty has fixed the pay of the Merdahs after four rates viz., first 300 Dams; Second 280 Dams; third 270 Dams; fourth 260 Dams and

SATISFA IN SA

the pay of others at five rates, each of which are divided into highest, middle and lowest.

First Rate:	Highest Dame	250
The latest and	Middle Dams	
	Lowest Dame	230
Second Rate :-		220
	Middle	210
	Lowest	200
Third Rate :		190
	Middle	180
	Lowest	170
Fourth Rate :-	Highest	160
	Middle	150
	Lowest	140
Fifth Rate:-	Highest	130
	Middle.	
	Lowest	110 "
	Tromcos sames in	110

These are the remarks of Abul Fazl on Akbar's Artillery. They are very important for the history of the Manufacture of Fire-Arms in India. We notice in these remarks the personal attention of Akbar to every detail of this manufacture because Artillery was regarded by him as "the locks and keys of the Empire" as Abul Fazl puts it. Other details of the Artillery department recorded in these remarks speak for themselves. They may be useful to us for comparison with similar details pertaining to the use of Artillery by the Marathas and the English in 17th and 18th Centuries. Unless we bring together all data pertaining to the use of firearms in India, we can have no true vision of their history in India.

(8) Rāmachandrapant Amātya (A. D. 1650-1733), who had a close knowledge of the Maratha administration under the Maratha Kings, Sri Shivāji Mahārāja and his sons Sambhāji and Rājārām, composed his celebrated Ājñāpatra dealing with Maratha Polity. It is dated **stt November 1716*. In this elaborate document we find some references about firearms as used by the Marathas. I note some of these references from its Edition by Prof. V. G. Urdhvareshe, Indore, 1939:—

Page 7:— In the description of Shivāji's guera or standing army reference is made to the following items:-

(1) Employment by Shivaji of trustworthy musketeers (कड़की,) bowmen (किर्मुक) etc. and their equipment.

- (2) Equipment of all forts with दास्तीळी, वाण, होके, मांडी, etc.
- (8) For Cavalry, बाजी, आरबी, इडाखी and कडी horses were maintained, 1
- (4) The atsens or artillery, consisted of the following items:-
 - (i) बन्दुकी = Musketeers
 - (ii) रामचांग्या = a kind of gun
 - (iii) दुराव्या = long-range guns
 - (iv) দিন্তৰাক (or দিন্তৰাকা) = a gun mounted on an elephant.
 - (v) सुदरनाङा = A gun mounted on a Camel
 - (vi) गाड्यावरील-भारी = Guns on wheeled carriages
 - (vii) करोळ = Mounted musketeers
 - (viii) होडे (हुडा or हुडा) = Vessels filled with gunpowder or bombs, or बाज or सहंग.
- Page 17: हुजरात should consist of लड़कर, भाडाव, हजाम, बंदुकी (musketeers), निरंदाजी and करोल (mounted musketeers).
- Page 18: Weapons to be kept ready are:—
 तरवारा, कटारा, जमदादा, पहे, भाळे, बाक, विचवे, सैत्या, टाक्व्या,
 तिरकमाना, बंदुकी (muskets). Other equipment consisted of —
 बस्तरे, भुंग्या, टोप, दुपहे, चिळसरें, पारवरा, तात्र, हुके, दारूगोळी
 (muskets), बाण, etc.
- Pages 40-48:— Chapter on Forts and their equipment consisting of भांडी, जुंबरे (जंड़रे) small Bandooks.

Instructions regarding the care and upkeep of ordnance:-

- (i) दास्याना should be kept away from residential quarters.
 - (ii) The cellar of the दारूबाना should contain दारूबे बस्ते (big bags of gunpowder) as also मददे (earthen pots) full of it.
- (iii) आण, दोके, etc. should be kept in the Central room of the Cellar, free from moisture.

1. CL राजन्यवहारकोश (शकार्ग) - Verses 154-168 mention the following horses:-

निळा = कर्क, बोर = बोण, कुमैत = इयामल, अंबरी = मेपवर्णक, अवल्ख = क्बुर, बरदा = पिक्क, अन्नरा = व्यामवर्ण, करडा = पाटल, रहवाल = सैन्यव, इराखी = यावन, अरब्बी = पारसीक, कच्छी = चवन, मुजिन्नस = विजातीय, बहरी = बाल्हीक, ताबी = सद्रज, ठांकण = पर्वतीय, तेबी = तेवस्थी, तुरकी = वस्तन.

2. Briggs in the Feriaths (Vol. IV, P. 63, Cal. 1910) explains. " Hooks " as Shell-

- (iv) Every fortnight the Havaldar should take out दारु, बान क्षेत्रे and heat them in the sun and again keep them in the cellar duly sealed (मुद्रा करून).
- (v) The राज्याना should be guarded day and night by special guards, who should not allow any one to approach without permission.
- (vi) As forts can be protected only by wief and argan, gunners should be maintained.
- (vii) Officers on the fort such as उदसरनोवत, बारगीर, सद्रसर-नोवत, and हवाळदार should practise the use of muskets (बंदुकी) and मोडी (cannons).
- (viii) भारी, जंडो, चरक्या, etc. should be kept at strategic points on the fort at different towers (दुरु ।
- (ix) The gun-carts (भांदियाचे गाडे), चरक (grindstone for sharpening weapons) and भांदी (cannons) should be installed on strong iron bases (मजबूत कोलंडी कर).
- (x) वारूच्या खिल्या (bags of gun-powder), गव (iron rods), भांडे नियाययाच्या कुंच्या (covers for cooling the cannons), गोळे (cannon-balls), कीट (burnt metal) etc., small stones from the river of the size of a betel nut, बाजाच्या प्रशास (फाळ), जामस्या (wicks for firing off the cannons), वर्षा (iron sheet attached to बाज), सामले (instruments for boring holes) for repairing the holes of cannons (काले) etc. — all this equipment should be always ready for use near the cannons (भांदी).
 - (xi) Articles of iron and stone (अहिनी, दगडी जिस्स) may be kept near the gun-powder.
 - (xii) होके, बाज should also be kept ready at all places, where guards are posted.
- (xiii) During the rainy season all the pieces of cannon with their openings and crevices should be coated with oil and wax. Their angular crevices (कोने) should be filled with wax. All the pieces of cannon should be provided with covers (कामादी) to protect them against damage.

 Other equipment also should be kept well protected against moisture.

- (xiv) Brave and trustworthy artillery men (गोडंदाज) with families (क्यिडेदार), should be employed in adequate number commensurate with the needs and artillery equipment of each fort. These men should be expert marksmen (नेमडा जागा दुरस्त मारणार असे).
- Page 44 Chapter on Navy (आरमार)

 The navy should be provided with brave men, equipped with मांदी, बंदुका, बाह्योळी, इके etc.
- Page 46 The enemy should be kept under naval fire (माडियाचा मार) on all sides (चीनीचे केसन).
- Page 47 The enemy should be kept terror-struck by destroying his ships with naval cannonading.

The foregoing notes amply show the use of fire-arms by the Marathas in the 17th century. They also reveal the importance attached to artillery by Shivaji the Great and his ministers in war-fare on land and sea. I do not, however, notice in them any reference to the manufacture of cannons and muskets as I find in the Section on Artillery in the Aini-Akbari. I wonder if any of the early Maratha rulers devoted any personal attention to the manufacture of fire-arms as Emperor Akbar did.

(9) In the Hobson-Jobson by Yule and Burnell (London, 1903) we get some information about fire-arms as follows:—

Page 37:— Article on ARSENAL—the following extract refers to the manufacture of cannon and gun-powder at Fez.

A. D. 1573—" In this city (Fez) there is a very great building which they call Darcana, where the Christian captives used to labour at blacksmith's work and other crafts under the superintendence and orders of renegade headmen............here they made cannon and powder and wrought swords, cross-bows and arquebusses, — Marmol Desc. General de Africa, lib. iii, 1, 92.

Page 854: - Article on FIRINGHEE: -

A. D. 1673 — "The Artillery in which the Fringis are listed, formerly for good pay, now very ordinary, having not above 30 or 40 rupees a month."

Pages 127-128: -- ** BUNDOOK **. s. H. Bandûk from Ar. Bunduk.

The common H. term for a musket or match-lock. The
history of the word is very curious, Bunduk, Pl. bandúk

was a name applied by the Arabs to filberts (as some allege) because they came from Venice. (Banādik, comp. German Venedig). The name was transferred to the nutlike pellets shot from cross-bows, and thence the cross-bows or arbiasts were called 'bunduk' elliptically for Kaus al-b. 'pellet-bow.' From Cross-bows the name was transferred again to fire-arms as in the parallel case of arquebus (Al-Bandukāni, 'the man of the pellet-bow' was one of the names by which the Caliph Hārūn al-Rashid was known, and Al Zahir Baybars al-Bandukdāri, the fourth Baharite Soldan (A. D. 1260-77) was so entitled, because he had been slave to a Bandukdār, or Master of Artillery (Burton Ar. Nights, xii, 38).

(1845-" Banduquis, or orderlies of the Maharaja carrying long guns in a loose red-cloth cover"-Drew, Gumoo and Kashmir.

Page 935:— TOPE-KHANA. s. The Artillery, the Artillery park, or Ordnance Department, Turco-Pers. Top-khana, "Cannon-house" or "Cannon-department," The word is the same that appears in reports from Constantinopte as the Tophaneh. Unless the traditions of Donna Tofana are historical, we are strongly disposed to suspect that Aqua Tofana may have had its name from this word.

1687—" The Toptchi" —These are Gunners, called so from the word Tope, which in Turkish signifies cannon, and are in number about 1200 distributed in 52 chambers, their quarters are at Tophana or the place of Guns in the suburbs of Constantinople."

- Rycaut's Present State of the Ottoman Empire

1726 - "Isfandar Chan, Chief of the Artillery (called the Daroger of the 'Topscanna')."

- Valentyn, iv, (Surate) 276.

1765-" He and his troops knew that by the treachery of the
Tope Khonnah Droger (Daroga) the cannon were
loaded with powder only."

- Holwell, Hist. Events, etc. i. 96.

10. Capt. Edward Moor in his " Narrative " about the siege of Dharwar (A. D. 1794, London) records some account of the city of Bijapur

(Chap XXIII). In this account he devotes some pages to the description of the great guns at Bijapur (Pages 322-323). Some points from this description may be noted below:—

- (a) -Enormous size of the guns he saw at Bijapur.
- (b) --Moor measured 8 guns-Formerly all towers had guns, from which only 12 remained.
- (c) —Measurements of the Malabar gun on the South Eastern side of the fort (See p. 322) — Length from breech to muzzle = 21 feet—5 Inches—Diameter at the breech = 4 feet, 5 inches.
- (d) —Short gun near the above monster called Cutcha -Butcha.
- (e) Moolk e' Meidan, largest gun on a tower on the south-western side with an inscription of A. D. 1685 by Alum Geer, commemorating his conquest of Bijapur (see plate opposite p. 322)— Several Inscriptions on it in Arabic, and one Persian Several stone shot lying near the gun also its rammer, which is like a mast.
- (f) -The gun on Coperes-boorj called Lumcherree or Far-flyer 80 ft. 31 inches x 9 ft.-2 inches at breech.
- (g) -Measurements of Moolk e' Meidan:-

Diameter at the breech - 4 feet, 104 inches

muzzle - 4 , 8 ,

of the hore - 2 .. 4

length - 14 . 1 .

Circumference in the middle — 13 " 7 "
Moor observes:—

"The first and last of these guns are constructed of bars of iron, hooped round, not upon carriages, but lying upon blocks of wood. The brass gun is fixed on its centre on an immense iron inserted in the ground and grasping its trunnions in the manner of a swivel, breech resting on a block of wood, supported by a thick wall, so that it cannot recoil when fired.

Besides the inscriptions, the brass gun has several ornamental devices upon it, particularly about the muzzle, where, if we recollect right, a lion and a tiger are fighting, and one of their mouths expanded forms the muzzle of the gun, in a manner, to our recollection,

not very clear. About the fort we saw several small guns cast of brass, and curiously inlaid with gold and with tiger mouths, a plan Tippoo has followed in casting some of his field pieces.

We are told, that there never was but one other
gun so large as Moolk e' Meidan, which was its sister,
Kurk o Bedjlee, Thunder and Lightning and that it was
carried to Poona, and perhaps melted down, as we never
heard of it there."

Pages 420 - 422 - Note XIII:-

"Several writers mention pieces of ordnance as almost incredibly large, but none that we have read of by any means approach the magnitude of Moolk e' Meidan and the others here described; which we repeat may be depended upon, as their dimensions were carefully taken.

Dow (History of Hindoostan, Vol. II, p. 278) mentions two pieces of ordnance capable of receiving a stone ball of six or seven maunds, or one of tron of thirty maunds. "The size of these guns" he adds in a note, "might be reckoned incredible, did there not remain to this day in India, pieces of as extraordinary a bore: particularly one at Arcot and another at Dacca." Dow is, we think, deficient in not giving the maund by which he estimated the weight of this shot: a maund is a very indefinite term, as it varies in different parts of India, from twenty five pounds, the Madras standard, to seventy four in some parts of Bengal.

Hanway (Travels in Persia, Vol. I, page 452) speaking of a gun in a city of 'Germany, says," It is a brass mortar, and will carry a ball of seven hundred and thirty pounds to the distance of thirty-three thousand paces and throw a bomb of one thousand weight." we do not clearly understand, how it could throw a bomb, by which we imagine a shell is meant, of greater weight than a shot, because the latter must 'necessarily be nearly the same diameter as the Calibre, and solid, which the former is not. Criticism is, however, thrown away upon so extraordinary a relation, which carries impossibility on its face as a very prominent feature: how can any force of powder impel a ball of any dimensions thirty-three thousand paces 1, which estimating the pace at two feet and a half, is upward of fifteen miles, or at only two feet, is twelve miles and a half?

Rennell in his Memoir (page 61) gives the mensuration of the gun near Dacca, spoken of by Dow; it is now fallen into river, together with the bank on which it rested. "As it may gratify the curiosity of some of my readers," says the Major, "I have here inserted the dimensions and weight of this gun. I took the measure very carefully throughout, and calculated each part separately. It was made of hammered iron, it being an immense tube formed of fourteen bars with rings of two or three inches wide driven over them and hammered down into a smooth surface; so that its appearance was equal to that of the best executed piece of brass ordnance although its proportions were faulty.

Whole length	22	feet 10½	inches
Diameter at the breech	3	,, 3	
4 feet from the			
muzzle	2	,, 10	**
" at the muzzle	2	. 21	- 1
" at the bore	1	foot 31	**

The gun contained 234, 418 cubic inches of wrought from and consequently weighed 64, 814 pounds avoirdupoize; or about the weight of eleven 32 pounders. Weight of an iron shot for the gun 465 pounds. "

Allowing for windags, that is the difference of the diameter of a shot and the calibre of the gun, one-twentieth part of the latter, as allowed in the ordnance tables, an iron shot for Major Rennell's gun will be in diameter 1 foot 2 inches 37-100ths, and as the increasing gravity of solid iron globes is as the cube of their diameters, and as a 42 pounder is in diameter 6 inches 68-100ths, the weight of an iron shot for this gun is consequently 117 pounds 8-10ths. The calibre of a 42 pounder is 7 inches 3-100 ths; of a 9 pounder 4 inches 21-100 ths; a 9 pounder shot in diameter is 4 inches; therefore a shot for Cutcha-Butcha, the gun first described in the text, allowing a calibre of 1 foot 9 inches, to require a shot of 1 foot 8 inches diameter, will weigh 1125 pounds. For Lumcheree, allowing 2 feet 35-100-ths of an inch diameter for the shot of its calibre of 1 foot 1 inch it weighs 150 pounds 4-10ths. For the calibre of Moolk e' Meidan 2 feet 4 inches, allow the diameter of the shot to be 1 foot 2 inches 6-100ths, it will weigh 1646 pounds 7-10ths!"

Page 108:—"On the top of the unfortified hill, one of those unwieldy, enormous pieces of ordnance, called before Malabar Guns, was found: it was ornamented with inscriptions and devices, and upon the whole, the hand-

Compare the description of the "Great gun of Agra" by Vincent Smith (Oxford History of India, 1933, p. 600, footnote 2);

[&]quot;A wonderful place of ordnames known as "the Great Gun" of Agra was taken (by the British). It was a casting in Brass or similar alloy, 14 feet, 2 inches long, with a calibre or bore 28 inches in diameter. It weighed 96,600 pounds and could fire a shot weighing 1500 pounds. When General Lake tried to remove it to Calcutts it sank in the Jumna. Bubsequently, Lord William Bentinch caused it to be blown up and sold as old metal."

somest of this kind of guns that came under the observation of any in our detachment."

Pages 135-136:— "We are still within hearing of the Chittledroog
morning and evening gun, which we learned was fired
from a thirtytwo pounder on the top of the hill. The
custom of firing a morning and evening gun in Tippoo's
garrisons, appears in "Memoirs of the War in Asia, by
an officer of Colonel Baillie's detachment," page 155,
to have commenced in 1793.

The hours of firing are six in the morning and nine in the evening.1

- Page 187: "Changerry is a hill fort at the very top is a good tower, with a six pounder, the only decent gun in the fort, mounted on it."
- Page 17:—"The principal battery from which the Bhow's (Parashuram Bhau's) guns were fired is of five guns and called the Ram battery,2 from having a favourite gun in it of that name."
- Page &:- "A most tremendous fire of guns, mortars, rockets, and musquetry was poured from the fort and batteries."

 (at Dharwar fort).
- Page 40:- "these guns were originally made of from bars hooped round, and beaten into shape: they will be spoken of hereafter by the name of Malabar guns, by which names Europeans know them."
- Page 506:— "Limber— A low two-wheeled carriage on which the trail of a gun is fixed when travelling: it is released in a moment if wanted to fire, which is called unlimbering the gun: the cattle being yoked to the limber, guns are of course dragged breech-first."
- Page 509:— "Rocket— A missile weapon consisting of an iron tube of about a foot long and an inch in diameter, fixed to a bamboo rod of ten or twelve feet long. The tube being filled with combustible composition is set fire to, and

At present in Poons the bour "mins in the evening" is indicated by lowering the
voltage of electric lamps. Formerly, in Poons this bour was indicated by the firing of a gun.
In the B. I. S. Mandal Quarterly (July-Outober 1946) p. 225—Mostyn's Diary (for A. D.
1972-1974,), P. 324 is quoted as referring to "Gunfire in the morning" at Poons.

^{2.} Possibly " Bass Battery " = Parashurans Battery named after Parashuram Bhau Patwardhan himself.

being directed by the hand, flies like an arrow to the distance of upwards of a thousand yards. Some of the rockets have a chamber and burst like a shell; others called ground rockets have a serpentine motion and on striking the ground rise again and bound along till their force be spent. The rockets make a great noise and exceedingly annoy the native cavalry in India, who move in great bodies; but are easily avoided, or seldom take effect against our troops, who are formed in lines of great extent and no great depth—This article is taken from Major Dirom's Glossary."

Page 510: - " Tumbril - A carriage for the gun ammunition."

The foregoing notes on the use of the fire-arms by Capt. Edward Moor possess both historical and technical interest for the students of the history of fire-arms in India. Moor had a scientific outlook both in his study of men and manners, as also in his record of this study. His close study of the great guns at Bijapur is very informative and instructive.

(11) In Mr. N. G. Chapekar's book " वेशवाहेच्या सावडींव " (Poons, 1931) we get the following references to fire-arms:—

A. D. 1758 — (Page 75) " लोकसाना" or Artillery Department of the Peshwa is referred to.

A. D. 1793 - (Page 87) - " वीफखाना."

A. D. 1779 - (Page 91) - Purchase of " que" or gunpowder:-

Rs. 2800 - Gun-powder! for Tophs or Guns.

Rs. 640 - do for Banduks

Rs. 78-12-0-250 Bags for gun-powder

=Rs. 3518-12-0 - Cost of gun-powder purchased from दलमधेट गोविंदजी

Rs. 1600 - 0-0 " वोश्रीदारू"

Rs. 960 - 0-0 " बंदुकी दाह "

A. D. 1780 - Rs. 276 - 0-0 " airfigie "

Rs. 56-4-0 Bags for gun-powder

A. D. 1781 — Rs. 62 - 8-0 Repairs to a gun called 'सरनागीन'; (Page 92) — Special earth (for casting the gun " सरनागीन") brought from Alibag.

Burges (P. 145 of Chrononology of Modern India - A. D. 1494-1894) - " A. D. 1702 Gunpowler first manufactured at Madraa."

Rs. 25-0-0 For melting a temple-bell, the metal being used for casting the gun "सरवारीन,"

- A. D. 1778 " वोफलाना "
- A. D. 1789 (Page 151) Rs. 15-8-0 For purchasing a 43%.
- A. D. 1770 (Page 156) 8 annas for purchasing 28 bullets for banduks.
- A. D. 1828 (Page 255) " बंदुका "
- A. D. 1769 (Page 155) For Banduks on Purandar Fort Rs. 62-8-0.
- A. D. 1790 (Page 92) " दारूचे कारमान्याकडे वासे "

It appears from the above notes that the casting of some guns and repairs to them was done at Poona or in its vicinity by local workmen. Some Banduks were also manufactured by local blacksmiths. On page 274, Rs. 5-1-6 have been debited on account of payment to a blacksmith (अनाजी सोहार सिरदोणकर) for preparing a new Banduk. A " पंचरती बोफ" is also mentioned on this page.

The chronology of the references about the manufacture and use of fire-arms in India recorded above may be tabulated briefly as follows:--

Source	Chrono- logy-A.D.	References
Hobson- Jobson	1260-1277	Usages of the word Banduk = crossbow and al- Bandukani = Man of the pellet bow.
Ancient Monuments of Kashmir by B. Kak	1421-1472	Zain-ul-Abidin rules in Kashmir - His Persian treatise on Fire-works. He gave impetus to paper-manufacture.
1	1466	Fire-arms, first introduced into Kashmir.
Hobson- Jobson	1578	Manufacture at Fez of Cannon and powder by Christian captives,
Ain-i- Akbari of Abdul Fazl	c. 1590	Detailed description of the Artillery Department of Akbar— Artillery, is called "Locks and keys of Empire"— Number and variety of ordnance unmatched except in Room— Cannon carrying a ball of 12 maunds— cannon requiring many elephants and 1000 bullocks for transportation—Akbar's great personal attention to this Department, with many officers and clerks—Akbar's invention of many kinds of ordnance—Seventeen pieces discharged by one match—Gujnāl, Nurnāl—

Source	Chrono- logy-A.D.	References
40.00		Special Artillery for each Subhā—Cannon for battery and boats prepared by skilful artists—large salaries to Officers.
A89.8		Rules for special fire-arms for Akbar's use -Bundooks that do not burst even though filled up to the muzzle—Smallest Bundook, two spans long and longest of 2 ells - Bundooks fired without a match, merely by the motion of the trigger.
The same		Akbar's personal supervision-Chiefs of Artists are Ostad Kebeer and Hussain-Akbar working like an Artillery engineer while in the Harem, supervising every detail of the manufacture of Bundooks - Rungeen or coloured muskets- Ak-
		bar's invention of a wheel to polish 16 muskets in a short time-Royal Artillery workshops - Akbar's daily firing practice-Sangram musket for hunting - four scales of pay for officers of the artillery-Author of some works on firearms.
Catalogue of Vene- tian Coins	1597 c. 1625	Death of a Milanese Gunner at Liahore. Musket barrels wrought in gold etc. brought by Venetians.
by Arava- muthan.	1682	A Venetian " maker of artillery " employed by the Mogol Emperor.
	1656 c. 1672	Manucci the Venetian "artillery-man" entered service under Dara Shukoh. A great piece of cannon, carrying about 540
	1680	pounds of gun-powder, cast by a native of Rome and mounted on the walls of Bijapur. Reference to a match-lock capable of firing 5/6 times after one loading only.
Sanskrit Poetesses.	Before 1600	References to विद्वार्ण (gun-powder), गोलिका (bullet) and भुकारती (musket) by Poetess Gauri.
Saint Tuka- rāma's Works.	1608-1649	Reference to "गोळ्या " (bullets.)

Source	logy-A.D.	References
Raghu- nātha Paṇḍita.	e. 1676	Explanations of the terms वाण, वरखंदाज, वन्तुक, दाह, जवजंग, जम्ब्रा, काना, and गोळंदाज in the राजन्यवद्दारकोश (शक्तवगं).
Bernier's Travels.	1656-1668	Bernier describes Aurangzeb's Artillery - employment of Portuguese, Dutch, Germans, French, etc., on high pay— Two kinds of artillery, heavy and light—The use of the fire work called "Cherkys" to separate fighting elephants—Heavy cannon drawn on carriages—Musketeers and foot artillery—camels, elephants and oxen used for transport of guns—ammunition chests on gun-carriages.
Hobson Jobson. Burgess	1687 1702	Topchi (gunners) and Tophana (बोफसाना) at Constantinople. Gun-powder first manufactured at Madras.
Ajñāpatra of Rāma- candra Amātya.	21st. Nov. 1716	Description of Shivaji's standing Army — Musketeers, bowmen, and their equipment-दार- गोळी, बाण, होके, भांडी, etc. रामचीन्या, दुराव्या, फिलनाक, सुतरमाल, गाडवावरील भांडी, करोल,—Standing army, consisting of लड्कर, इसम, बाडाव, बंदुकी, तिरंदाजी, करोल, Special care of the Artillery on forts—
		दास्त्वाना, दास्त्रे बस्ते, बाण, होके, to be kept dry in the rainy season — Periodic inspection of ord- nance by Havaldar — High officers on the fort should practise musketry.
150		Ordnance for the Navy— भांडी, बंडुरे, बंडुका, दारू- मोळी, हुके, etc.
	- Charles	Naval Cannonading against enemy.
Edward Moor's Narrative.	1704	Moor's description and measurements of the Great-guns at Bijapur. Moolk e' Meidan, Lumcherree, Malbar Gun, Kurk o Bedjlee (perhaps melted down) — Dow referring to big guns at Arcot and Dacca.

Source	Chrono- logy-A. D.	References
		Hanway's reference to a big gun in a German city, carrying a ball of 730 pounds. Renell's description of the gun near Dacca (fallen into river) as weighing 64, 814 pounds. "Malbar guns" so called by Europeans were made of iron bars hooped round and beaten into shape. Major Dirom's description of a Rocket.
N. G. Chapekar's "पेशवाईचे सावस्रीत,"	1758-90	Tophkhana (Artillery) of the Peshwas—Dealers in gun-powder at Poona — Two kinds of gun-powder, one kind for Tophs and the other for Banduks — Casting of a gun called " सरमागीन" by melting a temple-bell — Purchase of Banduks and bullets — Banduks prepared by local black-smiths — " दारूवा कारणाना"—Bags
Peshwa Daftar Selection No. 45 p. 101.	December 1759	of gun-powder. Purchase of cannon by the Peshwas from the English — Ramaji Mahadeva purchased pieces of Cannon from the English, each weighing more than 20 sers.
इतिहाससंब्रह by Parasnis (Jan. 1911) ऐतिहासिक दिपणे No. 22.		Tipu Sultan manufactured guns for his army and ceased purchasing guns imported by the English.

I hope the data collected in the present paper as also those in my previous paper will give the readers a fair idea about the use and manufacture of guns and gun-powder in India between about A. D. 1450 and 1850. I propose to deal with the use of gun-powder before A. D. 1400 in and outside India in another paper, as soon as sufficient evidence is gathered for this purpose. During my study of this topic, which is strictly realistic, I have failed to develop the view entertained by some previous writers on this subject that fire-arms were known in ancient India.

The History Of Fireworks In India Between A. D. 1400 And 1900*

All important inventions like printing, gunpowder, the mariner's compass, etc., have profoundly affected the course of civilizations of the East and the West. The history of the origins of these inventions and their wide-spread use throughout the world in the subsequent centuries is quite enchanting. Attempts have been made to study this history to the minutest detail on the strength of historical sources, both Eastern and Western. Unfortunately the Eastern sources are not easily available to European writers on this subject. So naturally their accounts of inventions which originated in the East are incomplete and sometimes vague and erroneous. The articles on these inventions in the Encyclopadia Britannica, though very useful to the average reader, are incomplete, as I found when I referred to them during the course of my studies in the history of Indian culture. There is, therefore, ample scope for research pertaining to the history of these inventions on the basis of known and unknown Asiatic sources of history.

During the last 36 years of my close study and research in the field of Indian literary and cultural history, the history of some of the inventions which affected Indian culture excited my curiosity. Among these, the invention of gunpowder loomed large on the horizon of my field of investigation. Accordingly I published two papers, recording the use of gunpowder in India for purposes of warfare. One of these papers deals with the history of the use of guns and gunpowder in India from c. a.d. 1400 onwards while the other deals with the history of the manufacture and use of firearms in India between a.d. 1450 and 1850. Copies of these papers were sent by me to numerous scholars in India and outside.

One of these scholars, viz., the late Prof. Tenney L. Davis, Editor-in-Chief of Chymia, devoted to the history of chemistry and published by the University of Pennsylvania, pressed me to write one more paper on the related subject of the Indian contribution to the history of fireworks, When I received this request from this most versatile American scholar I decided to accept it, especially because I was collecting some material on this topic to complete my inquiry about the use of gunpowder in India.

Transaction No. 17 published by the Indian Listitute of World Culture, Bangalors, pp. 1-26, 1963.

¹ Vide pp. 117-124 of the Sie Denison Rose Communication Volume edited by P. K. GODE and S. M. KATRII, 1939, and pp. 208-228 of the K. M. Munichi Diamond Jubilee Volume, Part I (1948), published by the Bharattyn Vidya Bhavan, Bombay.

both for warfare and for entertainment. Unfortunately, Professor Davis is no longer with us to see the completion of the present paper, as he suddenly passed away in January 1950 after posting to me a batch of his papers on the history of Chinese alchemy and a proof of my paper on the history of ambergris in India, which appeared in Vol. II of Chymia, dedicated to his memory. The pleasant memory of my contact of two years with Professor Davis still haunts me as I write this paper.

In the article on "Fireworks" in the Encyclopædia Britannica (14th Edition, 1929, Vol. 9, pp. 281-283), no detailed history of fireworks is recorded. The following points in this article will, however, give us a background for the present study:—

(1) The history of pyrotechny may be said to have begun when a prehistoric fire maker first mixed saltpetre with his charcoal cooking-fire to use as tinder. Other ingredients were added later.

(2) When the principle of the gun was evolved by Berthold Schwartz in the 18th century the pyrotechnic mixture used by him was named "gunpowder."

(8) With the introduction of artillery the military fire worker came into existence. He provided pyrotechnic engines of war as also spectacular fireworks in celebration of victory or peace. During the 17th century and onwards, most occasions of national rejoicing were celebrated by displays of fireworks, generally provided by military fire workers.

(4) It was not until the early part of the 18th century that displays of any pyrotechnic merit were produced.

(5) During the 17th century two schools of pyrotechnic thought developed, viz., (i) the Nuremberg school and (ii) the Italian school.

(6) The Peace of Aix-la-Chapelle in 1749 was celebrated in London with a display of fireworks.

(7) De Frezier in his two books published in 1707 and 1747 describes the introduction of colour in fireworks.

(8) In the first quarter of the 19th century the era of modern pyrotechny began with the introduction of potassium chlorate (discovered in 1788) in the manufacture of fireworks. Two metals, magnesium (c. 1865) and aluminium (in 1894) were introduced and gave to fireworks a brilliancy never before attained.

(0) The famous displays of fireworks at the Crystal Palace, London, were instituted in 1865.

(10) The National Peace Display in Hyde Park in 1919 was the greatest display produced up till that time.

- (11) In the literature on fireworks the writings of the following authors are noted :-
 - (i) Vannucio Biringoccio (Pirotechnia, Venice, 1540 and 1553)
 - (ii) De Frezier (1707, 1747) (v) Websky (Leipzig, 1878) (iii) Ruggieri (1801, 1821) (vi) Denisse (1878)

 - (iv) Chertier (1848, 1854) (vii) A. St. H. Brock (1922)

These are the only points of historical interest in the article on "Fireworks" in the Encyclopaedia Britannica. The earliest work on fireworks mentioned in the article is Pyrotechnia by Vannucio (1540). I shall record subsequently in this paper some formulæ in Sanskrit for the manufacture of fireworks by a royal author, who flourished in Orissa. between A. D. 1497 and 1539. This Indian author was evidently a contemporary of Vannucio, who published his work on fireworks in 1540.

The History of Fireworks by Alan St. H. Brock (London, 1949) is a very important publication on the subject. Its first 10 chapters are of special interest to me as they deal with such topics as the origin of pyrotechny, pyrotechny in the East and in Europe (from early years to the 18th century) and pyrotechny from 1800 to 1948. The following points from this detailed history of fireworks will be found useful for understanding correctly the historical perspective in which my evidence on the history of fireworks in India must stand, in the light of our present knowledge of this subject:-

- (1) The book contains some pictures of displays of fireworks and related exhibits of historical interest. I note below the details of some of these illustrations by dates:-
 - 1570-Display at Nuremberg, the earliest print showing fireworks in action. (Plate I)
 - 1600-Display at Florence in honour of the marriage of Henry IV of France. (Plate I)
 - 1635-A printed book on fireworks by John Bate of London. (Plate II)
 - 1650-Display at Nuremberg. (Plate III)
 - 1678- do, in honour of the visit of Leopold, Emperor of Austria (Plate IV)
 - 1685-Display on the Thames for the Coronation of James II. (Plate VIII)
 - 1676-Display at Versailles for 5 days. (Plate V)
 - 1785-Display at Meudon on the 5th birthday of the Dauphin of France (Plate VI)

1749—Displays at The Hague and at London to celebrate the Peace

of Aix-la-Chapelle. (Plate facing p. 52)

1769—Ticket for ball and fireworks in commemoration of "Shakespeare's Jubilee" at Stratford-on-Avon, signed by George Garrick, brother of the famous actor. (Plate VII)

1763-Ticket for display to celebrate the Peace of Paris. (Plate VII)

1688—Display on the Thames to welcome William of Orange to London. (Plate IX.)

1688-Display at Amsterdam to mark the Coronation of William in London, (Plate X)

1713-Peace Display on the Thames, (Plate XI)

1810—Display at Paris on the occasion of the marriage of the Emperor Napoleon to Marie Louise. (Plate XII)

1762—Illuminations at Buckingham Palace: Birthday of King George III. (Plate XII)

1751—Fireworks at Versailles: Contemporary water-colour bearing the signature of the pyrotechnist Torré. (Plate facing p.81)

1814—Grand Jubilee Display at the Green Park. (Plate facing p. 96)

1816 Two posters about fireworks by Mr. Brock: This plate contains two pictures, of Queen Victoria's Coronation Display and of fireworks at Vauxhall Gardens. (Plate XIV)

1685 (6th November) - Act of 1685 Prohibiting the Manufacture, Sale and Firing of Fireworks. (Plate facing p. 140)

1855—Fireworks at Versailles celebrating the visit of Queen Victoria to Paris. (Plate XVIII)

1852-Display at Paris. (Plate XVIII)

1869—Display at the Crystal Palace: Visit of the Khedive of Egypt and De Lesseps, Engineer of the Suez Canal. (Plate XIX)

1892—Fire portrait of the Shah of Persia (60 ft. high) fired at the Crystal Palace. (Plate XIX)

1855-Fireworks at Woolwich Marshes celebrating the fall of Sebastopol. (Plate XXIII)

1886—Display at Lisbon celebrating the marriage of the Crown Prince of Portugal. (XXIV)

1892-"Niagara of Fire" from Brooklyn Bridge, New York.
(Plate XXV)

1908—Display celebrating the Tercentenary of the founding of Quebec. (Plate XXV)

1919-Display at Hyde Park. (Plate XXVI)

1947—Display at Cape Town for the Royal Visit. (Plate XXVII)

1946—Rockets over the Thames: National Peace Display. (plate XXVII)

1858-Explosion in Madame Coton's Factory. (Plate XXVIII)

1842--Explosion at D'Ernst's Factory. (Plate XXVIII)

1841-Rocket Practice at Woolwich Marshes: Picture showing Queen Victoria, the Duke of Wellington, etc. (Plate facing p. 224)

1673-Fireworks used for advertising by a quack doctor who died in this advertising stunt. (Plate XXIX)

1751-1772- Diderot's Encyclopaedia: Plate showing Manufacture and Apparatus of Fireworks. (Plate XXX.)

The foregoing dated illustrations about fireworks give us in a nutshell the history of fireworks in the West from A. D. 1570 onwards.

(2) Brock gives us a "Bibliography of Manuscripts and Printed Sources" in Appendix I to his *History of Fireworks* (pp. 267-270). I note below some items from this Bibliography:—

(i) Manuscripts by dates:--

A. D. 1432-MS on the "Feuerwerksbuch." (In the University Library, Freiburg)

C. A. D. 1438-Latin MS. (In the Royal Library, Munich)

1785—Artificial Fireworks: 3 Volumes, with illustrations. (In Brock's possession.)

(ii) Printed Sources.—Dates of printed works on Fireworks are as follows:—

1859, 1696 (London), 1816,1529 (Strasbourg), 1817, 1591 (London), 1807, 1909, 1893, 1620 and 1630 (Pont-à-Mousson), 1818, 1825, 1635 (London), 1845, 1891, 1540 (Venice), 1578, 1922, 1884, 1880, 1844, 1912, 1830, 1854, c. 1540 (Venice), 1823 (Philadelphia), 1822, 1825, 1943, 1882, 1876, 1579, 1735, 1864, c. 1620, 1919, 1885, 1741, 1747, 1895, 1915, 1873, 1906, 1765, 1776, 1878, 1845, 1846, 1878, 1588 (London), 1607 (Strasbourg), 1629 (Paris), 1836, c. 1812, 1824, 1852, 1628 (London), 1643 (London), 1648 (Worcester), 1824, 1740, 1745, c. 1870, 1865, 1801, 1821, 1812, 1854, 1729, 1650 (Amsterdam), 1710, 1859, 1612, (Brussels), 1865, 1850, 1930 (New Orleans), 1947 (Brocklyn), 1900 (New York), 1573 (London), 1878, 1698 (Copenhagen), 1896.

Encyclopædias, Periodicals, etc:—
1865, 1753 (Chamber's Encyclopædia), 1943, 1948, 1947, 1824,
1929, 1751-52 (Diderot's Encyclopædia), 1802, 1856, 1921, 1886, 1941.

Brock's Bibliography about fireworks gives us a fair idea how the invention of gunpowder has been exploited in Europe for purposes of warfare and social entertainment. It is worth while preparing a bibliography of manuscripts and printed sources in India pertaining to gunpowder, firearms, fireworks, etc.

The Sanskrit texts on the manufacture of fireworks discovered by me belong to the period, A. D. 1497-1539. These texts appear to be the earliest, if not the only texts about the manufacture of specific fireworks, some of which have come down to us. In Brock's Bibliography the earliest MSS about fireworks are dated A. D. 1432, 1438, etc., while the earliest printed books are dated A. D. 1529, 1540, etc.

- (3) Speaking about the origin of pyrotechny Brock observes that the discovery of the possibilities of saltpetre as an aid to combustion, somewhere in Asia, led to the gradual development of pyrotechnic mixtures. The knowledge in course of time spread to Europe, where, early in the 14th century, the monk Berthold Schwartz invented the gun, adapting a pyrotechnic mixture to his purpose. Two hundred years later firearms were introduced into China by the Portuguese. (p. 19)
- (4) The Chinese employed explosive missiles as early as A. D. 1282. "War rockets were used in India in very early times." There is no definite evidence as to when fireworks first began to play their part in Chinese civil life (p. 20). Two works on pyrotechny written during the Ming Dynasty (A. D. 1368-1644) contain a few references to the subject, not of much practical value (p. 23). Chao Hsüchmin's Outlines of Pyrotechnics (c. A. D. 1753) seems to be the only work on civil fireworks to have appeared during the long history of pyrotechny in China. There are two books on Chinese military pyrotechnics written about the beginning of the 17th century.
- (5) In a. D. 1659 a pyrotechnist named Kagia began manufacturing fireworks at Tokyo, in Japan. Since 1868 August 1 has been observed as the date of the great fireworks festival of Tokyo. (p. 26)
- (6) Although primitive firework mixtures must have been known in India and used by the Hindus for many centuries it was not until almost the beginning of the present century that any advance was made. The cracker is used in India in differing forms known as golu, pataka, vengagvedi, koroo, adirvedi etc. "Chinese fire " mixture is used by Hindu pyrotechnists burnt in paper, bamboo containers and earthenware pots. These are known as Tubri. Other fireworks used in India are anar, puljari.

burusu, chandrajota or mahteb. Rockets are known as abusavanani or hawai (p. 28).

Brock's history of fireworks is exhaustive so far as European sources are concerned but it contains no historical information about fireworks in Asiatic countries, including India.

Prof. L. Carrington Goodrich of Columbia University records some information about gunpowder on pp. 152-154 of his Short History of the Chinese People, New York, 1951. The following points from these pages are noteworthy:—

- (1) During the Sung Period (a. p. 960-1279) the application of explosive powder to war was a major development.
- (2) The firecracker (known in the 6th century A.D.) was originally employed for religious ceremonies.
 - (3) Fiery projectiles were used in warfare as early as the 12th century.
- (4) According to Chinese historians the process of making explosive powder was first described fully in a military handbook issued in A. D. 1044. The first trustworthy reference to the use of a mixture of sulphur, sultpetre, paper, charcoal, tung oil, etc., for military purposes dates from the year A. D. 1000.
- (5) Full development of fire weapons is noticeable under the Mongols in the 13th and 14th centuries.
- (6) In a. p. 1126-27 and in 1161-62 the Chinese utilized explosive weapons both on land and water against the invading Jurchen.
- (7) In a. D 1259 and 1272 the Chinese used such weapons as a long bamboo tube from which bullets were ejected by touching off the powder, to halt the advancing Mongols.
- (8) The Mongols were fully equipped with fire-weapons, like a catapult capable of flinging large rocks and a field-piece called Mangonel, constructed by two Moslems.
- (9) Whoever may have invented the cannon and smaller pieces, the Chinese and their immediate neighbours played a significant part in the early stages of their development; the Chinese alone originated the firecracker and allied fireworks. 2

In September 1948, I received from my friend Prof. Tenney L. Davis a reprint of an article on "Early Chinese Military Pyrotechnics," written by him in collaboration with Prof. James R. Ware of Harvard

² Vide " Invention and Use of Gunpowder and Firearms in China. " By WANG LING. (Isin, 1947, No. 87, pp. 160-178).

University and published in the Journal of Chemical Education, vol. 24, pp. 522-537, November 1947. This article contains much valuable information about the history of pyrotechnics in China which is not known in India. The following points from this article supply us the Chinese background for the history of fireworks in India:—

- (1) According to Goodrich and Feng, guns were in use in China before the visit of Portuguese navigators to Canton in A. D. 1517, in fact, as early as A. D. 1236, Goodrich has published photographs of ancient Chinese iron cannons bearing the dates A. D. 1356, 1357 and 1377. The Peiping Museum contains copper cannons dating from the period of Hungwu (A. D. 1368-1398) and others from the period A. D. 1403-1449. The Chinese had real firearms in the 13th century. In 1132 bamboo tubes were filled with a pyrotechnic composition and used for throwing flame. In A. D. 1259 bullets were loaded into tubes along with the composition and thrown out when it burned. In A. D. 1236, p'ao were cast from gold, silver, iron and bronze.
 - (2) From fireworks, Firearms were undoubtedly derived.
- (3) Among Chinese texts on military subjects the following dealing with military pyrotechnics are noteworthy as they contain many informative and interesting illustrations:—
- (i) Teng Tan Pi Chiu by Wang Ming-hao (end of the 16th century), 28 illustrations.
- (ii) Wu Pei Chih by Mao Yuan-i (about A. D. 1621), 222 single pages of pictures.

The contents of these treatises are examined at length by Davis and Ware with illustrations which supply us a complete picture of the various steps in the evolution of guns from sponting fire weapons. The fire weapons³ described in these treatises are: (i) Arrows carrying an incendiary composition, (ii) Fireballs, (iii) Incendiary stink bombs, (iv) Spouting fire weapons, (v) Rockets, (vi) Exploding weapons; Grenades, bombs and shells; (vii) Artillery and field pieces, and (viii) Guns.

(4) The following chronological table given by Davis and Ware gives at a glance the history of fireworks in China from the 6th century A. D. onwards:-

S. We may compare the Chinese fire weapons with those used in India from 1400 onwards. See my paper in the K. M. Munshi Volume, Part I (1948) on the manufacture of firearms in India. In Akbar's time a body of gunners was kept on some vessels. (See Ain-i-Akbari, FRANCIS GLADWIN'S translation, Vol. I. p. 195 (Calcutta, 1897). Side by side with the bow and prov. the bundook was also used for hunting. The Ain-t-Akbari refers to Akbar's "killing the lion with a matchlock." (Ibid. p. 198)

Chronology A. D.	Item
6th century	Bamboos, cracking in a fire, used in Hupeh and Hunan to drive away malignant spirits. Firecrackers not yet known.
608-617	Emperor Yang-ti of the Suy Dynasty introduced fireworks, probably firecrackers.
618-906	Tang Dynasty. Fang I-chih (c. 1630) believes that re- creational fireworks, fire trees and silver flowers were al- ready known. A certain Yttan Shu-chi, whose history is very much beclouded, mentions crackers, rockets, serpents or squibs, and exhibition pieces.
917	The Sovereign of Wu had a furious fiery oil for use in warfare.
968	Yo I-fang prepared fire arrows for the Sung Emperor.
1126	Fireballs thrown from catapults were used against the Kin in defence of K'ai-feng Fu.
1132	An invention of Ch'an Kuei, long bamboo tubes filled with a pyrotechnic composition used to rout bandits at Te-an.
Before 1164	Wei Shang used against the Kin fire stones made from saltpetre, sulphur, and willow charcoal and thrown from catapults.
1221	Kin Tartars attacked a Chinese city with t'ieh-huo-p'ao, gourdshaped explosive bombs of cast iron, about two inches thick.
1282	Kin Tartars defending Lo-yang and K'ai-fèng Fu against the Mongols, employed "heaven-quaking thunderers" (explosive bombs) and "flying fire spears" (equipped with fire tubes).
1259	Chinese at Shou-Ch'un employed t'u-huo-Ch'iang, long bamboo tubes which threw smoke and fire and one or more bullets.
1272 1356)	Chang Shun had fire spears and fire ballistae on board boats at Siang-yang Fu.
1357 1377	Cast-iron cannons of these dates exist in Chinese museums.
1368-1898 }	Copper cannons of these dates in the museum at Peiping.
1403-1449)	Emperor Yung-lo established a fire-weapon brigade, General Chang Fu, in his assault on Topang, used guns and bombs attached to animals.

I have given above the historical background of the origin and development of fireworks in China and Europe. It now remains for me to record my evidence about the use and manufacture of fireworks in India. I record this evidence below to enable other scholars to supplement it with new material from sources not known to me:—

(1) In the English translation of Gulistan by the Persian poet Sadi (c. A. D 1175-1292) by Francis Gladwin. (Bombay, 1894, p. 183, Chapter VII—Tale XIII ("Effects of Education") we find the following:—

"An Indian was teaching others how to make fireworks, when a wise man said to him: This is not a fit play for you, who inhabit a house made of reeds. Until you are persuaded that the discourse is strictly proper speak not; and whatever you know will not obtain a favourable answer, ask not."

When I read this passage I thought that I had found the earliest reference to the manufacture of fireworks by Indians. Before accepting this reference as genuine, however, I wrote on December 5th, 1944, to my learned friend Khan Bahadur Prof. A. K. Shaikh, inquiring if Gladwin's translation of the lines containing the reference to fireworks was correct. In his prompt and scholarly reply to my letter Professor Shaikh wrote to me on December 7th, 1944, as follows:—

"Gladwin's translation of the passage in Gulistan is wrong. The correct translation is 'A Hindû (the word Hindu also means a slave) was learning (i.e., practising) Naptha-throwing' etc. The word used in Gulistan is Naft or Nift which is Arabic, from which are derived Naphtha, Naphthaline, etc. It was an inflammable liquid, with which thin glass bottles or balls were filled and these latter thrown against the enemy as incendiary bombs, somewhat like the modern hand-grenade. When struck against any hard substances in the body of the enemy, the container would break and let loose the contents, which would immediately burst into flames and set fire to combustible articles. It was generally used in warfare in the middle ages.

There are some works written in Persian bearing on the subject. Gunpowder is known in Persian and Urdu as Barah which is a Turkish word. Persian words relevant to Fireworks are:— इवाई, महताबी, अनार, आवश्यांकी, दास्थाना, Other interesting Turkish words are:— बंदक, बंदकवी, वर्मचा, तोष, तोषकी, दास (Gunpowder) is also a Persian word."

In view of the above reply, I could not regard Sadi's as the earliest reference to the manufacture of fireworks by Indians.

(2) "Abdur Razzaq, the ambassador from the Court of Sultan Shah Rukh, who stayed in Vijayanagar from the end of April a. p. 1443 till the 5th of December, a. p. 1443 during the reign of Devaraya II, mentions the use of pyrotechny in the Mahanavami festival." The words of this Persian Ambassador about pyrotechny are quoted by Dr. B. A. Saletore on p. 374 of his Social and Political Life at Vijayanagar, etc., (Vol. II) as follows:—

"One cannot without entering into great detail mention all the various kinds of pyrotechny and squibs and various other amusements which were exhibited."

It is clear from this reference that various kinds of fireworks, either manufactured at Vijayanagar or imported from outside, were used at Vijayanagar in A. D. 1443 and possibly many years earlier for purposes of entertainment at festivals.

(3) Ram Chandra Kak in his Ancient Monuments of Kashmir (London, 1933) gives the political history of Kashmir. In his account of the reign of Zain-ul-Abidin (A. D. 1421-1472), he refers to his work on fireworks as follows:—

Page 36— The King himself composed two works in Persian the first being a treatise in the form of questions and answers on the manufacture of fireworks and the second entitled Shikayat (The Plaint), a poem, etc.

Page 38— It was in his reign, in the year A. D. 1466 that firearms were first introduced in Kashmir.

It is curious to find that the Chinese text on military pyrotechnies by Wang Ming-hao, noticed by Davis and Ware in their paper referred to above, also belongs to the end of the 16th century. It remains to be investigated whether the Persian treatise on fireworks by the Kashmir Muslim King Zain-ul-Abidin had anything to do with the Chinese texts on military pyrotechny composed before A D 1472. I hope that some Persian scholar will throw some light on this point from Persian sources.

(4) Verthema in his Travels (Argonaut Press, Liondon, 1928) writes about Malacca and Sumatra in Chapter XII. He was at Pidar (Pedir) in Sumatra. About the people of this place he observes on page 86 as follows:—

"They are also very great swimmers and excellent masters of the art of making fireworks."

The period of Verthema's Travels was " A. D. 1502-1508." It is, therefore, clear from his reference to fireworks in Sumatra that the art

^{4.} See Elliot's History of India, IV, pp. 117-18.

of making fireworks, which was in a flourishing condition in Vijayanagar in A. D. 1448 and current in Kashmir between A. D. 1421 and 1472, had also penetrated as far south as Sumatra and Malacca by A. D. 1500, if not earlier.

Verthema describes the City of Vijayanagar (Bisinegar), its elephants and elephant-fights (pp. 51-2). In this connection he observes (page

52) as follows :-

"But if at any time they (elephants) are bent on flight it is impossible to restrain them; for this race of people are great masters of the art of making fireworks and these animals have a great dread of fire, and through this means they sometimes take to flight."

The manufacture of fireworks at Vijayanagar and their display observed by Abdur Razzāq in a. D. 1443 had reached perfection by A.D.

1500 as vouched by the above remarks of Verthema.

(5) Barbosa in his Travels (Vol. I. London, 1918, page 117) describes a Brahmin wedding in Gujarat and the use of rockets on this occasion as follows:—

"During this time they [the bride and the bridegroom] are entertained by the people with dances and songs, firing of bombs and rockets

in plenty, for their pleasure."

It is evident from this reference to the use of fireworks by Barbosa in his Travels (a. D. 1518) that fireworks were manufactured in India on a large scale about a. D. 1500 and were available in plenty in Gujarat for

use at marriages and on other festive occasions.

(6) The testimony of foreign observers as to the use and manufacture of fireworks in India between a. D. 1443 and 1518 recorded so far needs to be corroborated from Indian sources. So far, I have referred to only one treatise on fireworks in Persian, by Zain-ul-Abidin, the Muslim King of Kashmir (a. D. 1421-1472), but no Sanskrit text on the manufacture of fireworks has been discovered by any scholar. In search of such a text I was fortunate in discovering a section on the manufacture of specific fireworks in a Sanskrit work called the Kautukacintāmaņi 6 by Gajapati

^{5.} Published by the Hakluyt Society, London. Second Series, No. XLIV, 1918.

^{6.} Aufrecht records the following MSS of Kaufubscinfamani .-

СС I. p. 1310 की तुकचिन्तामणि dh B. 8, 80 by Rudradova K. 248.

कीतुकिन्सामणि med. Oudh IX. 26. Burnell 696 by Prathparudradeva.
Bikaner 846.

C C II, p. 256--की, जिल्लामणि An. Rgb 1031 (inc-) med. by Prataparudradova-

C C III. p. 285--- 1. चिन्तामणि by Prataparudradeya. Bd. 281.

Prataparudradeva of Orissa (A.D. 1497-1539), the reputed author of some works on dharmasastra like the Sarasvativilasa, etc. Aufrecht mentions this royal author 7 of Orissa and the works attributed to him. None of the MSS of the Kautukacintāmani mentioned by Aufrecht in his Catalogue are available to me except the following, found in the Government MSS Library at the Bhandarkar Oriental Research Institute, Poons:-

- (1) MS No. 1031 of 1884-87. Folios 52-55 of this MS are devoted to विनोदनानि or royal entertainments. In fact, these folios contain formulas for the preparation of different fireworks such as:-
 - (i) कल्पवृक्षवाणः
- (v) युष्पवर्तिः
- (vi) बुखुंदरीरसवाणः
- (iii) चंद्रज्योतिः (vii) तीक्ष्णनासः (iv) चंपाबाणः (viii) पुष्पवाणः

- (2) MS No. 981 of 1887-91. This MS is dated A. p. 1778 but it is a copy of an earlier MS dated A. D. 1670. Folios 37-38 of this MS contain the formulas for fireworks (in Sanskrit verses) referred to above.

The text of the Sanskrit verses containing the formulas will be edited by me later by procuring copies of the MSS of the Kaututkacintamani from other libraries. I may, however, note below the materials used in the manufacture of fireworks as found in the Sanskrit verses describing the formulas :-

- (1) mas: Sulphur. (WPC)8
- (2) ववश्चार:—Saltpetre. (WPC)
- (8) wing :- Charcoal. (WPC: charcoal of bamboo, pine, willow, birchbark, etc.)
- (4) तीइणस्य छोइस्य चर्णः -- Powder of steel.
- (5) डोइपूर्म :-- Powder of iron. (WPC: Powder of roasted iron)
- 7. Cafa. Catalo. I. p. 848- प्रसापस्ट्रदेव गजपति, son of पुरुपोत्तम्देव, grantem of कपिलेशरदेव, patron of विश्वनाथसेन. Works attributed to him :
 - —कोतकचिन्तामणि IL 8108, Bik. 646
 - —निणयसंबद्
 - —प्रतापमार्तण्ड
 - --सरस्वतीविलास

^{8.} The letters WPC indicate the Ws Pei Chih, the Chinese text on military pyrotechnica by MAO YUAN-I, written about A. D. 1631. I have put the letters WPC against the materials used in Indian pyrotechnics to indicate that these materials were also used in China for the A STATE OF REPORT OF PARTY AND PARTY AND PARTY AND PARTY. manufacture of fireworks.

- (6) " वास्रोजनं जांगडारुपं इवं सरक्वडनिः" Exudation from copper called जांगड, having the lustre or colour of an emerald.
- (7) and Yellow orpiment (WPC: orpiment).
- (8) यावान्यागेरिकं—गैरिक—Ochre. (Marathi काव, गेरू)
- (9) anti que-Wood of the Khadira tree.
- (10) নাভৰ or নাভ--A hollow piece of bamboo.
- (11) वर्तिका-A wick.
- (12) पंचक्षार—Five kinds of salt. Apte's Dictionary mentions आर-श्रिवय—three kinds, viz., natron, saltpetre, and borax.
- (13) तीइणळोड-Steel.
- (14) वेजुनाल-A hollow piece of bamboo.9
- (15) बायुपायाणमंत्र-आयुपायाण=आयुपायाण-Lodestone.
- (16) चिन्तुकात्रय-
- (17) प्रदेशीयमञ्जा or प्रदेशमञ्जा—Pulp made of the crushed seeds of the castor-oil plant.
- (18) Ha-Quicksilver or mercury. (WPC)
- (19) wafer Paste made from food (rice, etc.).
- (20) वंशनाळ—A hollow piece of bamboo.
- (21) जाग-Tin or lead. (WPC: powder of lead)
- (22) अवांतार (अर्ड । अंगार)— Charcoal prepared from the wood of the अर्ड (Madar, स्ट्रं) plant.
- (28) गोसूत्र—Cow's urine.
- (24) 龍頂田田一龍貝田—Vermillion or cinnabar. (WPC)
 - (25) Estates—This may be sseares or sseares—Yellow orpiment, (WPC: orpiment)

The foregoing list of ingredients of pyrotechnic mixtures used in India along with other accessories for the manufacture of fireworks c. A. D. 1500 speaks for itself. It is possible to suggest that the Chinese formulas for the manufacture of fireworks were brought to India some time about A. D. 1400 and then modified by the use of Indian substitutes for Chinese ingredients, not all of which may have been then available in India. The main pyrotechnic ingredients, like sulphur, saltpetre, charcoal, powder of iron, etc., had to be retained in the Indian formulas as they were the very basis of pyrotechny; they were available in India from early times.

^{9.} Long bambee tobes filled with a pyrotechnile composition some used to rout bandits in China. This was an invention of Chen Kuei (A. D. 1182).

(7) Consistent with my discovery of Sanskrit formulas about the manufacture of fireworks current in Orissa about A. D. 1800 and used for royal entertainment, I have found a brief description in Sanskrit of the display of fireworks for royal entertainment in a Sanskrit work, called the Akalabhairava-Kalpa, represented by a MS in the Tanjore Manuscript Library. I acquired a copy of this voluminous treatise for the B. O. R. Institute and studied it. The results of my study of this treatise have been published by me in a paper 10 in the Karnatak Historical Review (Dharwar, 1939). This treatise contains references to guns and fireworks and is obviously later than c. A. D. 1400. In Patala 60 of this treatise affect (nālikā) or a gun is mentioned among 32 weapons to be worshipped by the King. In Patala 62, dealing with several entertainments (vinodas) for the King, I find the following passage describing a display of fireworks:—

" ततः पश्येदारुयन्त्रविद्येपानस्यन्द गाकृतीन् । दिवा आन्त्या करुपयतः केतिषक्षेत्रसा निश्चि ॥ उद्यावचान् वाणवृक्षान् ततः पश्यक्ततेष्यः । च्छुतिपान्चामराकासम् तिर्मगृद्धिकस्तो बहुन् ॥ ततः प्रस्यकासोधन् धनगित्रतमीपन्यः । धृणुयादाणनिनदं विनोदायिस्पूषकस् ॥ एव प्रतिदिनं रामा विभोदान् पंचविक्षतिस् ।", etc.

In this passage the author gives us a description of the several structures used in the pyrotechnic display which the King was to witness each day. The expression of analysis (būnavykṣān) in possibly refers to structures on which the būnas or rockets were hung and from which they were fired off in the air. Sparks of fire were emitted from these structures and the whole display looked like the hairs of a Chowrie. Some of the sparks issuing from these structures were shot off at a tangent. The entire display came to a close with the sound of a rocket (būna), which was fired off last to indicate the end of the entertainment.

(8) From the references to fireworks in the Sanskrit sources recorded above P now turn to references to fireworks in Marathi literature.

^{10.} The title of this paper is " Abidolikairams Knipa ; An Unknown Source of the History of Vijayanagara, "

II. This is possibly a display of the rocket called the several described in the formulas of fireworks given by Gajapati Prataparudradeva of Orises.

^{12.} Possibly the rocket called the चामर्याण in the formulas of Prataparadradera was used for this display.

The earliest description of a display of fireworks in a marriage procession so far discovered by me is found in Saint Ekanātha's Marathi poem Rukmiņi-Svayamvara completed in Saka 1492 = A. D. 1570. The text of this description is found on pages 106-7 of Ekanāthacaritra by Mr. D. B. Sahasrabuddhe (Poona, 1883). In describing the procession of the bridegroom's party on the occasion of the marriage of Rukmiņi with Kṛṣṇa (Chapter 15 of the Rukmiņi-Svayamvara) Ekanātha writes as follows:—

" सकति रजतम औषध । करूनि अग्रियंत्र संबद्ध । कृष्णापुरं वातिविनोद् । एक प्रवृद्ध दाविती ॥ ११७ ॥ अप्री लावनी दावीं दावीं | ममता बाळिती हवई । गगना उसकही पादी । श्रुवीन ठायीं निमाली ॥ ११८ ॥ मोहबन्त्री समनमाळा । बद्भिपुष्पं भासती डोळा । फलें म्हणती अवला । पाहतां डोळा ते राख ॥ ११९ ॥ जितलोभाची चिचंदरी। निम कावनी टाकिकी वृही। पेटक्या पडती जनावरी | उरी शिरी जाळीत || १२० || वेळन उपदास अनळा । बाळीवी कोधाचा भइनळा। भडमदा निषति स्वाळा । तोडी तत्काळ निमाळा ॥ १२१ ॥ दाती धहनि क्रणडीडा ! खाळिती कामाचा हातनळा । घरू नेणती त्या बहुता । जिबी जिब्हाळा पोळती ॥ १२२ ॥ " etc.

In Ovis 123 and 126 Ekanatha describes the display of आज (rocket) and the variety of fireworks called चंद्रज्योती. The names of fireworks found in Ekanatha's description of fireworks are:—

- (1) silivin A small gun or rocket.
- (2) इबई A firework which rises up in the air with a stream of fire.
 - (3) समनमाज A firework producing garlands of fire flowers.
 - (4) विश्वंदरी A rocket which goes with a hissing sound (PR)
 - (5) HEAGI A firework kept on the ground and emitting a stream of fire sparks.

- (6) gradur A firework held in the hand and emitting a flow of fiery fire sparks.
- (7) wo A rocket (PR)
- (8) चंत्रजोती A firework which emits fire, producing a moonlight effect. (PR)

In the above list of fireworks I have put the letters PR against those which are mentioned by Prataparudradeva of Orissa in his formulas described in the Kautukacintāmaņi. The names हुनई, विश्वदरी, भूदनका, हात-नका, बाज and चेह्नकों कि are still current in the Deccan. These fireworks are still used in our marriage processions as they were used in Ekanātha's time in the 16th century.

From the evidence recorded so far about the history of fireworks in India it is clear that by a. D. 1600 the use of fireworks for entertainment purposes had become current in Gujarat, Mahārāṣṭra, Orissa, Vijayanagar, and even Sumatra. The history of fireworks in other parts of India is worth investigating from other regional sources with which I am not familiar.

(9) Another Maharaştra author, Saint Ramadasa (A. D. 1608-1682) refers to guns and fireworks in his varied writings. So far I have traced the following references in the Ramadasa Samagra Grantha (Poons, 1906):—

Page 345—निरवनैमिक्ट विधिसंग्रह सोपान, मानसपुता, Prakaraņa 13 —This section deals with the description of a bhajana or devotional singing accompanied with the display of fireworks:—

" दिवटमा दिखाल चंद्रजीती ।

बाण, दवसा झळकती ।

मळे, चिचंद्रमा भावती । चंचळत्वें ॥ ९ ॥

फुळवामा, बंदुका, खनिने ।

पट्टे दांड भेदिती बाणें

अभिनव कीती बाखाणे । भार गर्जती ॥ १० ॥ "

Page 588 — 3-45 of Ramayana in Śloka metre, Prasanga 13 —
A display of fireworks before King Rama at night :—

" निश्ची प्राप्त झाली असंसाध्य दादी । बहु दीवटपा लक्ष कोटवानुकोटी । किती एक ते उंच नेले उमाळे । नले बालितों घोष तैसे उफाळे ॥ ३२ ॥ सरारां कुछ बाबती अंतराणीं ।

कडाडीत घोषे निराणीं निराणीं ।

भुरारां हवाया किती एक वेळां ।

चळ पाहती कथ्वंनक्षत्रमाळा ॥ ३३ ॥

बह् कीवघे दिव्य नानावरींचीं ।

किती एक तेजाळ तीं क्सरीचीं ।

घवीनें घडी तेजपुंजाळ होती ।

उजेडेंचि ते खोक छोको पहाती ॥ ३४ ॥ "

This is a fine description of a display of illuminations and varied fireworks before King Rāma. As fireworks were unknown in the time of the Rāmāyaṇa in India and even in China it is an anachronism to insert any description of them in any story based on the Rāmāyaṇa. Being accustomed to displays of fireworks in his time, Saint Rāmadāsa could not but insert a description of them in his writings.

Page 521—Description of a festival on the completion of a Ramatemple at Chaphal (Satara District):—

" दिवटमा हिस्सक बंद्रज्योती । बळे भरवत कटती । बाण हवाया झरकती । गगनामध्ये ॥ १३ ॥ "

Page 623-Advice to King Shivaji on Katra-dharma:-

" जैसा <u>भांदवांचा गसोला</u> । सिमंच सारामध्ये पडिखा । वैसा अधी रिचवका । परसैन्यामध्ये ॥ ६ ॥ "

The expression "भांदगांचा गलोला" refers to the use of cannons (भांदी) in warfare.

The names of fireworks referred to by Saint Rāmadāsa in the above extracts are as follows:—

- (1) हवाया-plural of हवह, mentioned by Ekanatha.
- (2) कान-mentioned by Prataparudradeva and Ekanatha.
- (8) and plural of wat, mentioned by Ekanatha.
- (4) चंद्रज्योदी-mentioned by Prataparudradeva and Ekanatha.
- (5) नक्षत्रमाळा—compare समनमाळा mentioned by Ekanatha.
- (6) चित्रंत्रवा—plural चित्रंदरी mentioned by Ekanatha and Prataparudradeva.
- (7) फुलवाजा—compare पुष्पवर्षि mentioned by Prataparudradeva.

Almost all the fireworks mentioned in Rāmadāsa's works in the 17th century are used today. Rāmadāsa also mentions wiff (cannons), बंदूका (muskets), and कांग्रें (small cannons or mortars with gunpowder used for producing thundering sounds during pyrotechnic displays).

(10) We have seen above that the term and (būna) in the sense of a firework has been used by Pratāparudradeva of Orissa (c. A. D. 1500), by Ekanātha (A. D. 1570) and by Rāmadāsa (c. A. D. 1650), but we have no means of visualizing this firework. Bernier in his Travels (Constable, London, 1891) in India (A. D. 1656-1668) helps us to understand this contrivance known as būna, which he calls "bannes." The following extract from his Travels describes "bannes" and its use in contemporary warfare:—

Page 48- Speaking of the battle between the Emperor Aurangzeb and his brother Morad-Bakche, Bernier observes:-

"... here and there were placed men who threw bannes, which are a sort of grenade attached to a stick and which were thrown, from various parts of the line among the enemy's cavalry, and which produced the effect of terrifying the horses and sometimes of killing the men."

Page 277—Describing elephant-fights at festivals celebrated at Delhi and Agra, Bernier refers in the following extract to the use of a firework called cherkys, used for separating the fighting elephants:—

".... The animals can be separated only by means of cherkys, or fireworks, which are made to explode between them; for they are naturally timid, and have a particular dread of fire, which is the reason why elephants have been used with so very little advantage in armies since the use of firearms. The boldest come from Ceylon, but none are employed in war which have not been regularly trained, and accustomed for years in the discharge of muskets close to their heads, and the bursting of crackers between their legs."

The firework called cherkys in the above extract is in use today in Northern India. It is called with (carki) in Bengalis and with (carkhi) in the United Provinces¹⁴ as reported to me by my friends Prof. D. C.

14. My friend Dr. V. S. Agrawals has sent to me a list of fireworks manufactured at Lucknow (U. P.), among which I find no less than 9 varieties of carhas.

^{18.} My friend Prof. D. C. Bhattacharys of Chinsura has sant to me a fist of Bengali names of fireworks in which carks is found. He derives this name from the Sanskrit calva.

Bhattacharya and Dr. V. S. Agrawala, to whom I am indebted for the information about fireworks which they have kindly supplied to me. It is worth while recording a complete glossary of the names of fireworks and allied terms now current in different provinces of India and Pakistan.

(11) In the glossary of non-Sanskrit terms called the Rājavyava-hārakośa, composed by Raghunātha Paṇdita by order of the Maratha King Shivāji the Great about a.D. 1676, he explains the term wim (bāṇa) as safu-sassi or a tube filled with gunpowder. It think that "bannes" mentioned by Bernier, who was a contemporary of Raghunātha Paṇdita, is identical with bāṇa. In the 67th Paṭala of the work Ākāsabhairava Kalpa, a description of the Divali festival is given. In this connection the King is advised to witness a display of fireworks (winfami) at nightfall along with tributary princes, etc.;—

" सामन्तराजपुत्रादीन् समाहृषाय वैस्सद । निशामुके बागविचां हचामाछोक्य तत्परस् ॥ "

The Sanskrit word Bana means an arrow. Bana in the sense of a rocket appears in Indian sources after c. A. D. 1400. This word appears to be a non-Sanskrit word. It is for linguists to trace its history and etymology in non-Sanskrit sources.

(12) Tavernier (A. D. 1676) in his Travels in India (London, 1889) refers to the use of fireworks in India and Java in the following extracts:—

Page \$58—Describing marriage ceremonies in India Tavernier states that nuptials are celebrated with pomp and great expenditure. "He (the bridegroom) borrows moreover for this ceremony from the Governor of the place and from other great nobles as many elephants as he can, together with show horses and they march about thus for a part of the night with fireworks which are thrown in the streets and open spaces."

^{15.} See Page 12 of Rhjovysvahhrakola, Poons, 1880. The pertinent verses containing terminology about the use of gunpowder read as follows: —

शस्त्रवर्गे -- " यन्त्रव्यूहरूतारावास्याद्याणोऽग्निनलिका भवेत् ॥ १२९ ॥ नालीकं वरलंदाच नलीयन्त्रं तु वन्दुस्त्रम् ॥ तोफ नाम मवेदुस्का दारू नामाग्निचुणेकम् ॥ १३० ॥ लघुयन्त्रं वस्त्रां वस्त्रुए तु शतिका ॥ दीतिनाडं भवेत् काना गोलंदाच् यन्त्रवेषकः ॥ १३१ ॥ "

Page 860-While speaking about the King of Bantam at the western end of Java Tavernier observes: -

"There were five or six captains seated round the room who were looking at some fireworks which the Chinese had brought such as grenades, fusees, and other things of that kind to run on the water; for the Chinese surpass all the nations of the world in this respect."

(13) The Marathi poet Śridhara (died c. A. D. 1730) refers as follows to the firework called "candrajyoti" in his work "Harivijaya," II, 129:—

" चंद्रज्योती चंद्राकार । तेजे खंबर प्रकाशे ॥ " 10

(14) In the Peshwa Bakhar by K. V. Sohoni, written towards the end of the Peshwa Period (edited by K. N. Sane, Poons, 1925, page 149), an account 17 of the Divali festival is given as follows:—

Mahādji Scindia (a.D. 1727-1794) informed Peshwa Savai Mādhavrāo (a. D. 1774-1795) as follows :—

"The Divati festival is celebrated for four days at Koţā (in Rājasthān), when lacs of lamps are lighted. The Rāja of Koṭā during these four days gives a display of fireworks outside the premises of his capital. It is called " राज्यी छंडा" or 'Lankā of fireworks.' During this display the image of Rāvaṇa is prepared and kept in the centre of the show. Images of Rākṣāsas, monkeys and a big image of Hanumān are all prepared of gunpowder. The tail of Hanumān is then set on fire, and Hanumān begins to fly in the air setting fire to various houses in this Lankā of fireworks. Such a display is given by the Rūja of Koṭā during the Divāli festival.

The Peshwa ordered Mahādji to give a similar display of fireworks for his entertainment. Mahādji made all preparations within 15 days and the display was carried out on a dark night before the Peshwa and his Sardārs. The display took place at the foot of the Parvati Hill (near Poons) and was witnessed by the Peshwa and his Sardārs from the Parvati temple. It was a grand performance and was witnessed by the people of Poons in large numbers."

It appears from the above extract that displays of fireworks had become popular in Rajputana in the 18th century and that they were also used for royal entertainment on a grand scale.

^{18.} See p. 35 of the Marathi Sabdakola by Y. R. Date and G. G. Karva.

I have referred to this account in my paper on the "History of Divall Festival (Between s. A. D. 50 and 1945) published in the Annals of the B. O. B. Institute, Poons, Vol. XXVI, 1940, pp. 282-288.

(15) Rao Bahadur D. B. Parasnis published an article on "हिंदुस्थानो-चील इंग्रजी जावपदाजी" (English Fireworks in India) in Itihāsa-Samgraha,

Vol. I, No. 6, January 1909. Parasnis states :-

From the reign of Asafaddaula (A.D. 1775-1797), the Nawab of Lucknow, we find references to the attempts of the English to please Indian princes by their skill in the art of fireworks. About A.D. 1790, the English gave a remarkable display of fireworks at the court of the Nawab of Lucknow. A description of this display was sent to Nana Farnavis, the Chief Minister of the Peshwa at Poona, by his Vakil at Lucknow. This description is very interesting.

Parasnis has reproduced the entire letter of the Vakil in Marathi giving a detailed description of the displays of fireworks at Lucknow. I

give below a brief summary of this letter :-

An English artist of the name of "Karār," 18 expert in the art of fireworks, came to Calcutta. He gave displays of his skill in fireworks to the English at Calcutta and thus attained prominence. He was also properly rewarded by the English for his skill. The reputation of this artist spread far and wide in India. Two English officers at Lucknow of the names of "Idor" and "Alpu" wrote to the English at Calcutta to send the artist to Lucknow. The artist accordingly came to Lucknow and for six months he was busy preparing different fireworks. When the fireworks were ready "Idor" and "Alpu" arranged for their display with Mirza Amāni Hasanrajākhān and Haidarbeg Khān and Raja Mangatrao on a cloudless evening at their residence at Bibipur.

The English artist "Karar" made his fireworks ready. On a square pillar he placed a statue of fireworks and asked the persons assembled to shoot it with their guns with a view to starting the display of fireworks. Some Englishmen as well as Raja Javansing and Mirza Amani tried to shoot at the statue several times but missed their aim. As it was getting late the artist "Karar" with his own hand set fire to one of the fireworks to start the whole display. Immediately other fireworks caught fire and produced a veritable garden with fire flowers of orange, green and other colours. This display was quite spectacular and lasted for a time. Thereafter a column of fire blazed forth from a rocket and went high up in the sky and there split up into countless stars which, while falling down on the earth, were transformed into hooded serpents. Other fireworks blazed forth and went up in the sky and produced hundreds of fish, which fell

^{18.} This artist "Karke" meds to be identified. The names "Karke," "Idor" and "Alpu" are queer transformations of English names.

down on earth like stars. Just at this time began the rainfall-like display of fireworks. From another firework arose a mosque. To heighten the pleasure of this unprecedented sight the spectators heard, high in the air, great noises of the firing of muskets and guns. These noises were so great that they were heard at Lucknow proper, though they were produced at Bibipur. As the display was coming to a close there arose from the blazing fire of a rocket a Sun of fire, which moved up high in the sky and illumined the whole maidān below. A similar display of the moon followed from a rocket. To close this display the artist produced a sun-like fire flower which went on whirling in the sky producing bright letters which could be seen distinctly and read by the spectators.

Thus came to an end this marvellous display of fireworks by the English artist "Karar," who was richly honoured and rewarded by the Nawabs present. All the spectators thanked the English for this excellent entertainment. The people then dispersed and went to their homes.

The display of fireworks about A. D. 1790 given by an English artist Karār before the Nawabs of Lucknow is important for the present history of fireworks of India. So far I have not discovered any evidence about such displays by European artists prior to A. D. 1790, before Indian spectators.

(16) In the Hobson-Jobson by Yule and Burnell (Edition of 1903, London, pp. 208-209) many dated references to the Divali festival are recorded from a. p. 1613 to 1883. Among these references the following one contains a description of the Divali illuminations accompanied with fireworks:—

A. D. 1820. The Dewales, Deepaulle or Time of Lights takes place 20 days after the Dussera and lasts three days; during which there is feasting, illumination and fireworks. (T. Coats in Tr. Lit. Soc. Bo. ii, 211).

(17) The second marriage of Sayaji Rao II of Baroda was celebrated in A. D. 1820 with the use of fireworks costing about Rs. 3,000/-, as vouched by the following document in *Historical Selections* (Baroda Records) edited by C. V. Joshi, (Vol. VII, 1943, p. 925)

Letter No. 33, dated 28rd April 1820—Memo to Haribhakti for Rs. 18500/—, Out of this sum an amount of Rs. 3000/- was to be used for the preparation of fireworks:—

" ३,००० जतसवाजी दारू करावयासी "

(18) Buchanan in his Patna-Gaya Report, published by the Behar Research Society, Patna (Vol. II, pp. 625-626) records the following remarks about the manufacturers of fireworks in Bihar about A. D. 1811:— "These who make fireworks are not superior to the Atushbaz usual in Bengal. The fireworks are chiefly employed at marriages. At other seasons the same people make gunpowder of which a good deal is used. The nations seem to delight in the noise of firearms and fire powder merely for pastime but many people in this district are constantly provided with arms and ammunition; as a defence against robbers or rather from family habits, considering themselves as born soldiers. They do not, however, parade in arms and few of them now appear in public with even swords."

- (19) Edward Moor in his Narrative (of Operations against Tipu Sultan) London, 1794, gives a description of a rocket on p. 509 from Major Dirom's Glossary.
- (20) In the Ajnapatra of Ramacandra Nilakantha Amatya (edited by Urdhwareshe) there are several references to Bana (rocket). This document is dated A. D. 1716.
- (21) A small booklet called "द्वापको बहार" or "बह्मिंडा" by Laksmana Pāmjī Khopkar (Bombay, Anglo-Vernacular Press), 1886 records the methods of manufacturing different fireworks for Divali celebrations. The materials mentioned in this booklet are:—
 - (1) सोरा (सुर्यांबार)-
 - (2) nius-Balphur,
 - (3) कोळसा -- Coal of शेर, त्र, आधादा, देवदार, प्रंड, मिरची, निवहंग.
 - (4) बीच --
 - (इ) मनशीळ ---
 - (6) इस्ताळ ---
 - (7) arge Camphor,
 - (৪) নুজী---
 - (9) सुरमा -- Antimony.

Fireworks for which formulas are given in the booklet are: -

- (1) नळे--(मोतिया, चमेछी, दोवंती, बानार, सुरू, बैठकी)
- (2) फुळवाबी
- (3) चन्द्रज्योत (white, red, green)
- (4) सुरसुन्या
- (5) बाण
- (6) बस्या
- (7) बाबाजाची दारू
- (8) बंदुकीची दास

- (9) सफेत वारे
- (10) छाड तारे
- (11) चिचुंदि

Many of the ingredients for the manufacture of fireworks mentioned in the above booklet are also found in the Sanskrit formulas for fireworks (c. A. D. 1500) recorded in the Kautukacintāmaņi by Gajapati Pratāparudradeva of Orissa already referred to by me.

- (22) An article on the manufacture of fireworks for Divali celebrations has been published in the Marathi magazine *Udyama* of Nagpur for October 1986, pp. 666-668 The fireworks mentioned in this article are:
 - (1) बातपवाजी (white, blue, red, purple, green)
 - (2) डिकस्या
 - (3) फुलझडी
 - (4) कुळबाच्या
 - (5) मुइंनळे
 - (8) चंद्रज्योती
- (28) The modern Marathi poet Keśavasuta refers to fireworks in one of his poems as follows:—

" मोडे बाग ही चंद्रज्योती मधुनी ला फ्लबाज्या मळे "-केक, 181

(See p. 1808 of Sabdakośa by Date and Karve)

- (24) The following Marathi printed books about fireworks have been kindly brought to my notice by my friend Shri C. G. Karve 19:--
 - (1) अधिकीया by Gaņeša Bābāji Māţe (Litho Press, 1871).
 - (2) अधिवसकार by Govinda Morobā Karlekar (Litho Press, 2nd edition, 1889).
 - (3) अधिकीडा by Ranganatha Sakharama Late (1894).
 - (4) sugaraft by Samkara Yajñeśvara Garge (1927).

Information about fireworks has been given in such Marathi works as " हुबरकडासंग्रह," " उपयुक्तकडासंग्रह, " " उपयुक्तकडासंग्रह, " स्वतिष्यकडासतक, " etc.

(25) Shri V. K. Bhave in his recent book called "पेन्नचेकाकीन महाराष्ट्र" Poons, pages 362-63, makes some remarks on the आवपवाजी or fireworks in use during the Peshwa Period and in particular during the reign of Peshwa Savai Madhavarao. The names of fireworks given in these remarks are:—

I am thankful to Shri Karve for the trouble taken by him in searching for printed.
 Marathi writings on fireworks.

(1)	ताबदानी शेषनाई	(8)	वाम गा
(2)	आकाशमंदक तारोगण	(9)	पाणकॉयदी
(8)	चादरी दारुकाम	(10)	हातमळे
(4)	नारकी झाउँ	(11)	कोठ्याचे नळे
(5)	प्रमाचमक	(12)	फुलबाल्या
(6)	कैचीची झाडें	(13)	महत्ताका
(7)	गारसमध्ये		

In concluding my notes on the history of fireworks in India I have to request other scholars to supplement them with additional evidence from datable sources. In the present paper I have recorded my evidence about the history of fireworks in India and provided it with the background of the history of fireworks in China and Europe as recorded by other scholars. I shall welcome evidence about the use and manufacture of fireworks in India prior to a. D. 1400 from any source, Indian or foreign. I want in particular evidence on the following points connected with this problem:—

- (1) What person or persons brought the knowledge of fireworks to India?
- (2) What is the exact chronology of the transmission of fireworks to India?
- (3) Is there any evidence in Chinese, Persian or Arabic sources about the introduction of fireworks in India?

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4. The Mounted Bowman on Indian Battle-Fields — From the Invasion of Alexander (B, C, 326) to the Battle of Panipat (A, D, 1761) *

- J. RUSSELL SMITH in his article 1 on "Grassland and Farmland as Factors in the Cyclical Development of Eurasian History" makes the following remarks about the curious and striking part played by the horse from the steppes in man's affairs in Eurasia:—
- (1) Bishop thinks the Scythians may have been the first effective cavalrymen. Armed with a Compound 2 bow, which seems to have been an invention of the north, a cavalryman could ride circles around a charioteer. Hence the use of chariots in war declined in the near-east after the Assyrians, in the ninth century B.C., adopted cavalry from their enemies the Scythians.
- (2) The chariot was distributed to Ireland and Korea between 2500 and 1000 B.c. After centuries of using the chariot as an instrument of war-fare men began to fight from the back of the horse. But it was more centuries before the stirrup was invented.
- (3) Early uses of the horse sift down to this—meat supply, milk animals, assissant to the herdsman, the pet of princes, for pageantry, religious ceremonies, and war — especially war.
- (4) The horseman with a two-piece bow was the greatest "blitz" before gunpowder. This bow seems to have brought cavalry to the fore. The horse-man with a lance was not so potent. This bow brought the horse to his Golden Age in the affairs of men. From the beginnings of

Bulletin of Deceas College Research Institute, Vol. VIII, Nos. 1-2, pp. 84-46.

 See Smithsonian Report for 1944, Pages 357-394, Publication No. 3792 of Smithsonian Institution, Washington, D. C., 1945.

2. Vide Technical Arts and Sciences of the Ancients by Albert Neuburger (Eng. Transby Henry L. BROSE, 1930; Methuen and Co. London) pages 218-221 (The Bow, the Crossbow and Ballistic Machines). According to BROSE the Compound Box was made of the two pieces of the same material joined together. The Composite Box was made of a combination of different materials. The following points from NEUBURGER's comarks may be noted here:—

(1) The Simple Bow is the oldest. (2) The Wooden Bow was made of the yew tree or forms. (3) Odysseus carried a Composite Bow made of horse. Long before Hemer the Composite Bow was used by the Egyptians (Figure 298). One relic of this Bow dates from the time of Ramses II (15th cent. B. C.) and another from an Egyptian tomb of 7th cent. B. C. The Composite Bow comes from Asia (Fig. 289) and is made of horse, wood and sinews. It can shoot an arrow as far as 1000 yards and can shoot right through a Rison. "This achievement cannot be equalled by the heavy colt revolver used by the American army."

Cavalry with the Scythians about the Ninth Century B.o. to the date of the effective use of gunpowder the Calvalryman of the Eurasian grasslands almost continuously harassed the settled cultures upon the grassland rim and smashed them at will.

- (5) In the 9th century A.D., some one, apparently in France, invented the horse collar and traces. Then horses could pull a load and enter the economic realm.
- (6) The great Wall of China was built to stop he marauding mounted bowmen of the Steppes between the 7th and 3rd centuries B.C. It is a monument to the horse.
- (7) Gun-powder and the railway reduced the grassland man to impotence.

I am concerned in the above remarks with the importance of the mounted bow-man who dominated war-fare for hundreds of years in human affairs on account of his mobility as a fighting unit. Accordingly I propose in this paper to record some references to the mounted bow-man or the use of the bow and arrow made by foreign cavalry in ancient and mediaeval periods of Indian history.

(1) In a treatise on archery called the *Dhanurveda* (MS 4 No. 54 of 1886-92 in the Govt. MSS Library at the B. O. R. Institute, Poons) the author describes the আক্ষয়: and its uses as follows:—

folio है— " बाई पुनर्चनुद्धियं विष्णोः परममायुधम् । वितस्तिससमंगानं निर्मितं विश्वकर्मणा ॥ न स्वर्गे न च पाताले न भूमी कस्यचिक्तरे । तदस्यंश्रमायाति सुन्तवैकं पुरुषोत्तमम् ॥

 As regards the use of Guns and Gun-powder in India from A. D. 1400 onwards, see my article on this subject in the Decision Ross Volume, Paper 117-124.

4. This MS is dated Samvat 1968 = A. D. 1812. Other MSS of Dissurveda are No. 407 of 1887-91 and No. 558 of 1872-76. Some particulars from these MSS may be noted below :-

(1) No. 407 of 1887-91- allel " शियोक्त धनुवेंद " to the Colophon.

—verse S at the beginning refers to '' वीरचिन्सामणि "— verse 1 reads :-

" ईश्वरोक्तात् धनुर्वेदात् धासेनापि सुभाषितात् । पद्मात्याख्याय रचितो ग्रन्थः संक्षेपतो मया ॥ १ ॥ "

- (2) No. 558 of 1875-76 All the above details are found in this MS but the Colophon reads :-
- " एते शिवचनुर्वेदस्य भगवतो व्यासस्य । इति शार्ष्वेधरविरचितायां चितामणिनामने चनुर्वेदस्य परिच्छेदः ॥ "
- (8) No. 84 of 1886-02—The text of this MS is same as those of the above two MSS but some portions found at the beginnings and ends of the above two MSS are missing in this MS.

 The colophon reads " 表情 英國情報: 表情 明明表: "

पौरुषेयं तु यस्त्राई बहुवन्परशोभितम् । वितस्तिभः साई पद्भिर्मितं सर्वार्थसाधनम् ॥ प्रायो योज्यं धतुः शाई गजारोहाश्वसादिनाम् । रथिनां च पदातीनां वांशं चापं प्रकीतिंतम् ॥ इति चन्न.प्रमाणम् । "

The concluding verse of the above extract tells us that आईपनुः is to be used by warriors on elephant's back (नजारोडा:) and cavalrymen (जयसादिन:). It also tells us that बांग बाप or a bow made of बंग or bamboo is to be used by warriors in the chariot (प्राप्ता) and foot-soldiers (प्राप्ता).

Folio 7—The following extract prescribes how the war chariot is to be equipped with four bows (कार्यकाण चतुर्थ) and 400 arrows in quivers along with other weapons viz.—

स्तर्ग, गदा, शक्ति, परिच, मुद्दर, नाराचान् , परश्च, परिश, चमें, कुंत eto"रथे च धारयेज्ञद्रं कार्मुकाणां चतुष्टयम् ।
चतुःशतानि बाणानां तृणीरीयं प्रप्रयोत् ॥
सङ्घं चमें गदां शक्ति परिघं मुद्दरं तथा।
नाराचान्यस्युं कंते परिशादीक्ष धारयेत् ॥ "

One who has no chariots or elephants should ride his horse with the quiver at his belt and equipped with wan, who and was (bow):—

"न स्था न गजा यस्य सोखमेव समारुदेत्। कटिबदैकत्णीरसङ्गक्षक्तिधनुर्युतः॥"

Folio 8 — Under बुद्धविष the author informs us that mounted bowmen (साहने खर्चभेराः तुरमास्ताः) become irresistible on the battle field :—

> " धनुः संगति संश्रदा याजिनोमुखदुर्व(म)काः । अ(आ)कर्ण पति(कि)ता योधाः संभामे जयवादिनः ॥ परस्परानुश्का वे योदाः साङ्गैधनुर्धराः । युदजास्तुरगारुटास्ते अवित रणे रिपृत् ॥ "

Runaways from the battle-field should not be hunted by the powerful warriors for the reason that such men are likely to be infused with courage owing to their desperate condition:—

" भीहः पलायमानोऽपि नान्वेष्टच्यो बलीयसा । कदाचिच्छुस्तां याति मस्ये कृतनिश्चयः ॥ "

Evidently preference was given to chariots and elsphasts as vehicles in warfare. The combination of the horse and a bowman, inspite of its advantage, was not looked upon with fevour by Indians.

The extracts 6 quoted by me fully support the following extract on p. 97 of Prof. V. R. R. DIKSHITAR'S "War in Ancient India" (Macmillan, Bombay, 1944):—

"In Wilson's words, 'the Hindus cultivated archery most assiduously and were very Parthians in the use of the bow on horseback.' 7 One feature of this weapon was that it could be handled by all the four classes of warriors."

Prof. Dikshitas quotes Arrian's Indika on the mode of equipping Indian soldiers for war but this quotation refers to foot-soldiers carrying bows and not the use of the bow by the cavalry.

MITRAMISRA (C. A. D. 1610-1640) in his encyclopaedic work Viramitrodaya, in several divisions called "Prakāias," refers to several weapons of war (नामपुष्ठलाम प्रकार) in the Lakṣaṇaprakāia (Vol. XX of Chowkhamba Sans, Series, Benares, 1916). In the account of these weapons he devotes pages 273-292 to Dhanurveda or science of archery. The authorities quoted in this account are:— विष्णुवमीचर, वैश्वस्तन्त्र, वेवस्तन्त्र, वेवस्तन्त्

"शाक्षं पुनर्वपुर्दिन्वं । प्रायो योग्यं चतुःशाक्षं गजारोहाश्वयादिनाम् । रिवर्ता च पदातीनां वांशं चार्प प्रकीतितम् ॥ "

(ii) No. 6# of A 1883-84 —The title on the label is चीरचडामणि which is perhaps a misreading for चीरचिन्तामणि — The colophon reads :—

" इति भी वाहुजकुलालंकार भी अदरगहमाहात्मच— श्रीविछलदासविलासे घनुवेदनिर्णगप्रकाशः "

^{6.} I have quoted these extracts from three MSS of the title Egic in the Govi. MS3
Inheavy at the R. O. R. Institute. The text of this work is also represented by two more MSS in the above library via. —

⁽i) No. 138 of 1892-95 — ৰীংৰিবাদ্ধি অনুবঁহ — dated Samvat 1755 = A. D. 1679 —
copied at " অংশোবাই "—unde as follows:—

[&]quot; इति श्रीद्रोणमाषित वीरचिंतामणि धनवेंद समाप्तः "

T. I have not seen the anthorities on which WILSON's reference to the Indian use of the bow on horse-back is based.

^{8.} Somewara (A. D. 1186) in his 田田田田田 (Vol. II, G. O. Series, Bareds, 1939) pp. 162-169, deals with 明河田 and its feats but there is no reference in it to the um of the bow on horse-back.

In the section on swords (अहमप्रशंदा), which follows the Dhanarveda section, MITRAMISEA quotes from the औरानस चनुर्वेद (p. 298). This quotation contains the following stanzas:—

" क्षिती रवे बाजिनि कुन्तरे वा
गृहे हुमें नागरके प्रमादे।
सर्वत्र सर्वस्य च मार्गवेन्द्र
परायणं स्थाद् असिरेव नित्यम् ॥
धतुरिह शरपातादेव वै हस्ति शत्रुम्
दहति रिपुलम्हं वाजिवद्विजेवेन।
सुभटकरगतस्तु क्षिप्रमम्बासमात्रे
शमवति रिपुलेनो पातयोगेन सहगः॥"

In the first stanza the all-round use of the Sword is emphasized, while in the second the use of the Sword on the battle-field is indicated. Perhaps the line " यन्ति अपनावादेव से इन्ति अपना "has a reference to footsoldiers using the bow referred to by Arian in his Indica. The line " दहींव विप्रमान वाजियद्विजेत", which states that the fire of cavalry burns the hostile army by its speed, refers only to the extreme mobility of the horse. If, however, the entire second stanza is taken to be the description of a mounted अगर or expert warrior armed with bow and arrows along with sword, we have here an admirable description of a mounted bowman. The subsequent stanzas in the quotation from the जोशनस पन्नेत establish the superiority of the sword on the battle-field as follows:—

" मतङ्गजस्यो रथवाजियो वा शरक्षये शक्तगणक्षये च । समस्यितो वा विषमस्यितो वा । नरोऽसिना मद्यतीह सर्वान् ॥ स्वयत्वस्ये चापमङ्गे च विश्यस्य विवाजिनः । शत्रुमध्यावतीर्णस्य नान्यत् सङ्गात् परावणम् । "

In all disadvantageous situations created by the exhaustion of the supply of arrows and other weapons the warrior, whether mounted on an elephant, a chariot or a horse, can kill all who oppose him, by his award alone. Even when the bow is broken and the warrior is dislodged from his chariot or horse, the sword alone is the resort of such a warrior surrounded by the army of the enemy.

The treatises on Dhanurveda from which I have noted some references to the mounted bow man are not very old. It is, therefore, difficult to say whether the Indian cavalry before about 500 B. c. used the bow

from the horse-back. RUSSELL SMITH states that " Scythians may have been the first effective cavalrymen" because they were armed with a compound bow. If this statement is correct are we to presume that the use of the bow from horse-back was adopted by the Aryans in India from the Scythians? "The Assyrians in the ninth century B. C. adopted cavalry from their enemies the Scythians" - states Russell Smith. The Aryans who came to India brought the domesticated horse about 1600 B. C. and these "horsed-warriors defeated the elephant-armies of the natives of India" observes Mr. M. S. RANDHAWA in his recent article on the "Role of Domesticated Animals in Indian History. "9 Mr. RANDHAWA states that according to PEAKE and FLEURE the horse was first tamed in the Steppes of Central Asia and South Russia, which formed an immense grassland, where Erzewalskis horse is still found wild. If the Aryans used "the trained horse and the sword " against the elephant armies of the natives of India we have to inquire at what stage of their history they picked up the use of the bow on horse-back and from whom? Was it from the Scythians prior or posterior to their invasion 10 of India c. 150-140 B. c.?

In the account of the Bow and Arrow given by Mr. G. T. DATE 11 he discusses the following topics: —

- (1) Use of the bow by all warriors of the world in the early stages of civilization.
- (2) All ancient Indian warriors were expert shooters with the bow (e. g. the skill of Śrāvaņa of the Rāmāyaņa and Arjuna of the Mahābhārata in archery).

9. Vide p. 10 of Science and Culture, Calcutta, July 1946. The chronology of the Horse and Con Culture of Argans given by Mr. RANDHAWA is as follows:-

c. B. C. 1600—The domesticated horse brought to India by the Aryan nomads—No evidence of horse on seals of Mohenjo Daro nor any bones of horse discovered.—The horse was domesticated even before 5000 B. C.—

The training of the horse for war caused a great crisis in human history.

and B. C. — Alexander's invasion of Northern Punjab demonstrated the superiority of the horse over the elephant in warfare.

lef century A. D. —The horse had established its superiority over the elephant as far east as Mathura as proved by a Kushan sculpture showing a procession of Horses with the elephant humbly following.

13th century A. D.— The horse-period seaches its some in the borse-empire of the Mongols-16th century cannards — The sailing ship of the Europeans put land transport into the background.

10. Vide p. 277 of SMITH : Early History of India, Oxford, 1914.

^{11.} Vide pp. 11-15 of Art of War in Ancient India, Oxford University Press, London, 1922.

- (3) Similarity of the bows and arrows used by Vedic Aryans and Eastern Iranians.
- (4) There was no material change in the Vedic bow during the Epic period.
- (5) The Arthaiastra refers to four kinds of bow, some varieties of arrows, bow-strings etc.
- (6) The Brhat Saragadhara Paddhati deals with the bow and arrow in detail in its account of weapons.
 - (7) Certain signs of Indo-Sumerian Seals look like arrows.
 - (8) The bas-reliefs of Sanchi illustrate some of the weapons.
 - (9) Statement of the Greek historians that Indians used heavy bows.
- (10) Representations of the bows on coins of Candragupta II and Kumara Gupta I (shooting with the bow and arrow).
- (11) Dravidians knew archery from the beginning of their written history.
 - (12) The Agnipurana gives an account of archery.

In the discussion of the above topics Mr. Date does not refer to the use of the bow on horse-back. In his account of "War Animals and War Vehicles" Mr. Date refers to the following points which have a bearing on my present inquiry about the use of the bow on horse-back:—

- (1) The Aryan invaders of India brought the Turkoman horse 12 with them to India (see JRAS, 1919, p. 507).
- (2) During the Vedic period the horse was used mainly for riding, though there are some references to riding in battle.
- (8) The Dravidians used the horse for riding.
- (4) In the Mahabharata time the horse was used in the army, although no word equivalent to cavalry could be found. Soldiers on horse-back fought alone and were treated as an inferior fighting force.
- (5) By the time of Alexander's invasion the Indians had a respectable cavalry.
- (6) Poros had 4000 horsemen (see p. 102 of Invasion of Alexander).
- (7) The horse was never regarded in Ancient India as a superior fighting unit, and elephants and chariots occupied a position higher than cavalry.

^{19.} Vide Dr. M. R. Pitthawalla's remarks on "Role of Animals" in the Early Aryan Home and settlements (Indian Geographical Journal, Karachi, October-December, 1945). The horse was a native of the Syr-Amu Darya deab which was the most likely Home Region of the ancient Aryan Family. Its name has gone into the surnames of the Iranian heroes and Kings. c. g. Kerhasp, Arjosp, Guahlasp etc.

(8) The defects of the chariot were revealed more than once in combats with foreigners.

In his above account of horse as a war-animal I find no reference to the use of the bow on horse-back by Ancient Indians of Alexander's time. In fact Poros was defeated by the mounted bow-men of Alexander at the Battle of Hydaspes. In this connection Vincent Smith observes as follows (p. 64 of Oxford History of India, 1923):—

"The elephants on which Poros had relied proved unmanageable in the battle and did more harm to their friends than to their foes. The archers in the chariots were not a match for the mounted bowmen of Alexander; and the slippery state of the ground hindered the Indian infantry from making full use of their formidable bows, which they were accustomed to draw after resting one end upon the earth and pressing it with the left foot," 18

It is clear from the above evidence that the superiority of the mounted bownen of Alexander over the infantry bow-man of Porus was clearly demonstrated to the Indians at the Battle of Hydaspes in B. C. 326. It is, however, surprising that inspite of this demonstration Indians did not adopt the use of the bow on horse-back in their war-fare in succeeding centuries. Consequently it has become difficult to get any references to mounted archery in Sanskrit texts of the early period. 14

In the Holy Bible (New Testament, Revelation, Chapter 6) I have traced the following references to the mounted bow-man :--

"2. And I saw, and behold a white horse: and he that sat on him had a bow, and a grown was given unto him: and he went forth conquering and to conquer."

Really the mounted bow-man has gone forth through centuries of history "conquering and to conquer!"

^{18.} See p. 82 of Oxford History of India (1923)—Vincent SMITH, speaking of the equipment of the army during the Maurya period observes:— "Each horsemen was armed with two lances recembling the Greek Samusa and was protected by a buckler. The principal swappen of the infantry was a straight broad sword suspended by a belt from the shoulder: Jacobies and bows and arrows were additional arms. The arrow was discharged with the aid of pressure from the left foot on the extremity of the bow resting on the ground and with such force neither shield nor breast-plate could with-stand it". (See the picture of the of Veddah bow reproduced by SMITH on this page).

^{14.} DB. R. K. MOOKHRIER in his "Condragupta Maurya and His Times (Madras University, 1928) raters to some sculptures representing soldiers as follows:

P. 276 - Sculptures of acidiars wanting swords, bour and arrows on Sanshi topes (2st-

At this stage of our inquiry I have to record the following reference to mounted-bowmen in the Adiparvan of the Mahabharata 15 (B. O. R. Institute, Critical Edition, I, 124, 24):—

" ते स्म ढक्ष्याणि विविधुवाँणैनांमाङ्कशोभितैः। विविधैकांघवोत्स्ष्टैरुग्रन्तो वाजिभित्रैतम् ॥ २५ ॥ "

I have to request other scholars to point out to me some more references to mounted archery from the Mahabhārata, 16 the Rāmāyaṇa or any other Sanskrit texts of the early period say before A.D. 500. If Droṇācārya and his pupils in archery knew the use of the bow on horse-back as early as the Mahābhārata war we have to explain why Porus and his cavalry did not adopt it in practice against the mounted bowmen of Alexander. I strongly hope that our Mahābhārata scholars will explain

DR. MODERRIER speaks of Indian soldiers fighling in Europe in the 5th century B. C. "As early as 480 B. C. the army of Xeraes which invaded Greece comprised an Indian contingent clad in cotton garments (probably Sutrakantaka of Kautilya) and armed with case lower and iron-tipped case arrows."

15. In the account of the display of skill in arghery in the Jatugrahadahaparva of Adiparvas the reference to mounted bownen is traced in verse 24. S. C. MUKHOPADHYAYA in his English Trans. of the MBH. (Calcutta, 1899, pp. 278-279) translates this verse as follows:—

"The princes riding on fleet horses began to pierce the targets, quickly discharging various arrows on which their respective names were beautifully engraved". (In the Chitranhala Edition of Adiparvan, Poons, 1989, we have the reading [4]Hg: for [4]Hy: and 351-4] for 351-4] in verse 24). In the following verses which follow the use of the bow from the chariots is referred to:—

"कृत्वा धनुषि ते मार्गात्रथचर्याषु चामकृत् । सबपृष्ठेऽश्वपृष्ठे च नियुद्धे च महाचलाः ॥ २७ ॥ यहीतलञ्जनर्माणसातो भूयः प्रहारिणः । सम्मार्गान्यथोदिशंक्षेकः सर्वासु भूमिषु ॥ २८ ॥ "

16. J. TALBOYS WHEELER in his History of India (London, 1880), p. 6, refers to "Public Exercises" described in the Mahhhharata as follows:—

"Drope and his son Afwaithāma then entered the arens in white garments, and chanted the praises of Indra and the gods. The princes followed with their weapons in their hands and kissed the fact of their preceptor. They tegan by shooting arrows at a butt, first on foot, and afterwards from horses, clephants and chariots ". (Cf. Möh. I, 124, 27— " কুলা অনুধি ते मार्गालयसम्बद्ध पास्कृत । समुद्धि अपनिष्ठ मार्गालयसम्बद्धिः ॥ ").

^{-&}quot; The bas-reliefs represent nearly all the foot-soldiers as archers, which is in account with the statement of Megasthanes."

P. 277 —In the foreground of the picture are three warriors armed with Parthian bow and short straight sword of Homas shape; —they also wear cross-straps for carrying their quivers.

this riddle some day. For the present I venture to suggest that the reference to mounted archery appearing in the text of the Mahābhārata has been inserted at a time, when Indians came to know it as a result of their contact with Scythians or Sakas, who invaded India about 150-140 s. c.

Though Indians did not develop the art of using the bow on horse-back, foreigners from Central Asia residing in India practised it long prior to a. p. 500 as will be seen from the following evidence:—

RAMCHANDRA KAK in his Ancient Monuments of Kashmir (London, 1933) describes in detail the excavations at Harwan, a village about 2 miles beyond the Shalimar garden in Kashmir. In these excavations a wonderful pavement of the courtyard round a temple has been discovered. This pavement consisted of large moulded brick tiles, having various shapes and different patterns (Plate XIX). There are several pictures stamped on these tiles, among which I find "archers on horseback 17 chacing deer and shooting arrows at them" as follows:—

Plate XXIII, 3 — "On a horse fully accounted, horseman in armour riding at full gallop and drawing his bow. On his right side, attached to the saddle, hangs his quiver. Two ends of drapery flutter at his back."

Kharoshthi numerals 1, 4, 10 = 15.

Plate XXVIII, 14 - "A mounted hunter aiming an arrow at a fleeing deer."

Do -. 18 -- "Upper part of an archer wearing conical cap."

Plate XXIX, 20 -- "A huntsman with bow and arrow riding at full gallop." Kharoshti numerals: 1, 4, 20, 20, 20 = 65.

The pictures of the mounted bow-man on three different tiles leave no doubt that at the time the tile-pavement was constructed the use of the bow on horse-back was made by some residents of Kashmir, either native or foreign.

As regards the date of the tiles Mr. Kak observes as follows:
Page 109 -- (1) Each one of these tiles bears a number in Kharoshthi script.

^{17.} These pictures of mounted bowmen hunting deer may be contrasted with Kalidaea's description of King Dusyanta (आकुनाल Act. I, 6) hunting a dear scated in a chariet and armed with how and arrow (कुणासार द्रायपुरामापि साधिरत्यकार्मुके । मुसानुसारिणे साधाराद्रया-मीम पिनाविक्तम् ॥ ६ ॥). The ground was full of hollows, hence the charioteer alsokened the speed of the chariot by drawing in the reigns.—The mounted bowmen on Harwan tiles charing deer at full gallop apparently had no difficulties of the type experienced by Dusyanta in his chariot hunting a deer.

(2) The Kharoshthi script ceased to be in vogue in north-western India about 5th century A. D. The tiles are, therefore, much older in date than this time.

Page 110 -(8) The date of the tiles, and of the disper pebble masonry with which they are associated is "about A. D. 800."

- (4) The above date is further supported by the following data:-
 - The physiognomy and dress of men and women (on the tiles) are wholly unlike that of any races in Kashmir today.
 - (ii) The facial characteristics etc., trousers and Turkoman caps of the persons represented on the tiles show them to be Central Asian.
 - (iii) Kashmir had connection with Central Asia during the Kushan Period, when the Kushan rule extended from Mathura to Yarkand.
 - (iv) Some pious and prosperous Kashan must have built the Harwan shrine (with its tiled pavement).

"Among the foreign decorative motifs which reveal foreign influence are the figures of mailed horse men with flying scarves tied to their heads, which are strongly reminiscent of the contemporary Sassanian art of Persia."

The above evidence of the sculptures of about A.D. 300 depicting the mounted bowmen leads us to suggest that the reference to the mounted archery in the Adiparvan of the Mahābhārata has been inserted during the rule of the Kushan or Indo-Scythian Dynasty in India (from about A.D. 20 to A.D. 225) or more broadly between c.B.C. 150 and 300 A.D., when the text of the Mahābhārata may have assumed a settled form. I now request our Mahābhārata scholars to see if this suggestion is acceptable to them. 18

So far I have recorded the following evidence about the mounted bownen on the Indian battle-field:-

18. My friend Rao Bahadur K. V. RANGABWAMI AIXANGAR of Madras writes to main this connection in his latter of 22-7-1946 as follows:—

[&]quot;I have seen in the Madura temple and in one or two other temples figures of horseman armed with juvelies and smords, but not boxes. There are representations of Satyabhāmā using a boxe, when scated on the shoulders of Garnimha. Rāma was scated on Hanumān's shoulders when he fought with Rāvaņa. — These figures are of the late Vijayanagar period. — I do not remember any instance in our literature of archer cavairy and my impression is the same as that of Russell Smith, with the variation that I regard Persia, not Saythla as the original home of the mounted archer. You have selected an intriguing topic which has escaped (in spite of its importance) the attention of scholars till now."

- (1) Defeat of Porus by the mounted bowmen of Alexander the Great (B. C. 326).
- (2) Reference to the display of mounted-archery in the Mahabharata (I, 124, 24).
- (3) Reference to the use of Śārhya bow by riders of elephants and horses in the Dhanurveda (B. O. R. I. MS No. 54 of 1886-92— "प्रायो बोडवं धनुः शाङ्ग गजारोहाश्वसादिनाम्"). This treatise also refers to " साङ्गेशनुषंदाः तुरसास्टाः थोदाः " and prescribes the use of the bow on horse-back by one who has neither chariots nor elephants (" न रथा न गजा यस्य सोश्वमेय समारहेत् । करि-वदेकत्जीरवाहशक्तिधन्यंतः ").
- (4) Three pictures of mounted bowmen hunting deer on the tile-pavement (at Harwan in Kashmir) of about A. D. 300. According to RAMCHA-NDRA KAK these bow-men on horseback are not Indian but foreigners from Central Asia.

In Duarte Barbosa's account of Gujarat at the death of Mahmud Begada (A. D. 1515) recorded by M. S. Commissabiat in his History of Gujarat (Bombay, 1938), Chap. XX, pages 354 ff., we find a detailed description of the methods of warfare adopted by the Sultan of Gujarat. The following points in this description are noteworthy:—

- (1) The Gujarat sovereign employed a corps of war-elephants in accordance with Indian traditions; some of these animals were brought from Malbar and Ceylon at a cost of about £ 750 each.
- (2) Three or four men seated in howdahs on each elephant used bows, arrows, hand-guns etc. against the enemy.
- (3) The cavalry was composed of horses, bred in the country. The riders were expert horse-men, seated on high-pommelled saddles each carrying a strong round shield, two swords, a dagger, and a Turkish bow with very good arrows.
- (4) The warriors were mostly Persianized Turks, with whom the Persian game Changan (Polo) was a favourite pastime.

It is clear from the above account of Barbosa that the use of the bow on horse-back was made in the Gujarat army of c. 1515 A. D. by Persianized Turks and not by Indians.

About 150 years later than Barbosa's observation of the use of the Turkish bow on horse-back by the army of the Sultans of Gujarat we have the following observations about the effective use of mounted archery recorded by Bernier in his Travels (A. D. 1656-1668), (Constable, London, 1891):—

Pages 47-48 — Speaking of the army of Dara Shukoh used against Aurangzeb, Bernier observes :--

"The rest of the army consisted principally of Cavalry, armed either with sabers and those kind of half-pikes used by the Ragipous 19 (Rajputs); or with sabres and bows and arrows which latter weapon is generally used by Mogals that is (according to the present acceptation of the term Mogal) foreigners whose complexions are white, and who profess Mahometanism; such as Persians, Turks, Arabs and Uzbeks."

The superiority of the mounted archery even over musketeers is further vouched by Bernier as follows:—

Pags 48 — It cannot be denied that the cavalry of this country manoenvre with much ease and discharge their arrows with astonishing quickness; a horsman shooting six times before a musketeer can fire twice,"

In our story of the mounted bow-man we have started with 326 B. C., when Alexander defeated Poros on the strength of his mounted bowmen, and come to about 1660 A. D., when the Mogol army, consisting of Persians, Turks, Arabs and Uzbeks, was still using the Turkish bow on horse-back with great force and advantage. It is a pity that the Indian soldiers failed to adopt this effective method of warfare, even when they had visible demonstration of its superiority during a period of about 2000 years!

From Bernier's account of the use of Turkish bow by the Mogol army we come to the Battle of Panipat (A.D. 1761) an exhaustive account of which has been recorded by Prof. T. S. Shejwalkar in his brilliant monograph "Panipat: 1761" (published by the Deccan College Research Institute, Poona, 1946). Speaking of the weapons employed by the Marathas and the Afghans at this battle, Prof. Shejwalkar observes:—

Page 89 — "Now a cavalry battle fought with lance and sword on the Maratha side and musketry and archery on the other side (Afghan side) began in good earnest. It is certain that the Afghan cavalry under Ahmad Shah had more musketeers, match-lockmen and archers amongst them than were to be found in the Maratha army. Each Maratha of note had possibly a hand-gun by his side but he had neither love for it, nor expertness at its use. He preferred lance and spear at a short distance to the clumsy 20 bow and arrow or heavy long match-lock of those days."

Evidently the Rajputs in the Mogol army did not care to adopt the use of the how on horse-back, which was a special feature of the Mogol warfare.

^{20.} Contrast this statement with BERNIER'S statement that a horse-man of the Mogol army could shoot his arrows six times before a musketeer could shoot twice. Lonce and Spear were good weapons at close range but they were not effective against mounted archery.

Page 98 — "Now the battle entered its most desperate stage. The fight was a close combat with sword, spear, lance, dagger and knife "by Ahmad Sultan's good fortune" an arrow struck Vishwasrao killing him outright."

The effect of the death of Vishwasrao had a disastrous effect as we learn from the subsequent account of this battle. I presume that the arrow that killed Vishwasrao was from the mounted bow-man from the Afghan cavalry.

It will now be seen from what has been said and recorded above that from B. C. \$26, when the mounted bosomen of Alexander defeated the Indians under King Poros upto A. D. 1761, when the mounted-bosomen of Ahmad Shah Abdali routed the Maratha army, the Indian soldiers and their sovereigns did not care to study and practice mounted-archery inspite of its demonstrable superiority even over the crude muskets of Shivaji's time. 31

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El. In the Ajfiapatra of Bamacandra Nilakaniha Amatya dated 21st November 1716 he includes archers (तिराजी) in the formation of the Hujarat or standing army of the Maratha king (See p. 17 of आशापन, ed by V. G. Urdhvarese, Indore, 1989 —

[&]quot;आधीं हुजरात सवाबी, लष्कर, हशम, आडाव, बदुकी, तिरंदाजी, करोल, असे पंचरूद जमाव देवावें." P. 7 — " लष्कर, हशम, बंदुकी, तिरंदाज, आदिकरून...वारदान देकन etc.)

Here the musictores (बंदुकी) and archers (तिरंदाज or तिरंदाजो) are mentioned side by side, but the archers mentioned here are foot-woldiers armed with bows and not mounted bow-man. — For the me of archery in England upto the time of Henry VIII of England (A. D. 1691-1667) see article on Archery in the Encylo. Britannica.

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5. The History of the Stirrup in Indian and Foreign Horsemanship—Between B. C. 852 and 1948.

The horse has been the friend of man from remote antiquity in peace and war. The Aryans in India have made use of the horse from the time of the Rgveda up to the present day for offence and defence. In the military history of India as also that of the people of the other nations of the world the history of cavalry is associated with deeds of heroism and romance, which fill many pages of the history of the world. The use of the cavalry in India from the Mauryan times upto the present day has been proved by historical records of the different periods of Indian history. The importance of the cavalry ceased, however, in the recent second great world war (1939-1945) owing to the use of armoured cars, aeroplanes and other modern scientific weapons of warfare and finally came the Atom Bomb, with its mysteries and miracles, not to say an undreamt feeling of borror which still pervades the modern civilized world.

Whatever be the future military weapons of the so-called civilized nations of the world, the respect for the horse, which has been the friend of man for more than 4000 years, can never disappear from the human breast. The cultural history of the horse has been as enchanting as its military history. The Central Asia has been the home of horses for thousands of years and some of the races of antiquity like the Sakas or Scythians were expert riders, who made use of the bow and arrow from horse-back and hence were found invincible in land-warfare wherever they went.

The history of Indian horsemanship is quite a fascinating subject for the student of Indian military history. The taming of the horse, its use for riding or carriage purposes, the care of the horse, the selection of horses for carriage and such other matters connected with horse-culture and horse-breeding have been considered at great length in Indian and foreign books on horse-craft. I have read many works on the sangar and allied subjects but have failed to notice in them any reference to the stirrup, with the history of which I propose to deal in the present paper. My evidence though scanty is sufficient to establish the antiquity of the stirrup for more than 2500 years. Its appearance in Indian history appears to be later than about 100 B. C.

^{*} B. I. S. Mandal Quarterly, 1948, pp. 1-14.

There is no word for the stirrup in Sanskrit or Prakrit. Mr. Apte in his English-Sanskrit-Dictionary (2nd Edition, p. 413) mentions "quantity as equivalents for the stirrup. Evidently these are coined words. In his Sanskrit English Dictionary he does not record these words and their meanings. The words for the stirrup in the different vernaculars of India are being collected by my friend Dr. Siddheswara Verma and they will be recorded by me or Dr. Verma in a subsequent paper on this subject.

The absence of any Sanskrit word for the stirrup may suggest its foreign origin, though we cannot say that the stirrup was quite unknown in India even in pre-Musalman times. Unfortunately I have not found any literary evidence about its use by Indians except the following extract in the section on the game of Polo (त्रावाधानीविज्ञा) in the encyclopaedic Sanskrit work called the the मानसोहास or समिलपियामें विज्ञान composed by

the Calukya King Someśvara about A. D. 1180 :-

While describing the horses to be made ready for the royal Polo, Somesvara refers to " पाराधार:" or Stirrups of gold, hanging down on both the sides of the horse—

(Page 221 of मानसोहास, Vol. II, Baroda, 1939)
— " तानवं विश्वितानवानादाबात्यन्तमुत्तमान् ॥ ८३ ॥
सन्त्रीकुर्यास पर्याणेदेन्तिदन्तविनिर्मितः ।

पादाधारैस सौवर्णेकंन्विमः पार्वयोदंयो: । "

Page 224 —Pair of stirrups is referred to as ' पादाचारपुर्व '' in the following verses :—

— " अन्तर्वेद्यां समाकृष्य बहिवंद्यां(स्मा)कृताश्रयः । ददोक (रु) अक्षज्ञकृषय स्थिरहस्तोऽस्वयासनः ॥ १८ ॥ विस्तृतोरस्थलक्षेत्र बाह्यकर्णाश्रदन्तदक् । अङ्गुष्ठाश्रेण सम्योदय पादाधारयुगं ददम् ॥ १९ ॥ "

In the above extracts of c. A. D. 1130 the term " पादाबार " for the stirrup appears to be a coined one like " पादाबार " coined by Apte as we have seen above.

The Persian name for Polo is Chaugan or horse-golf. For many centuries it was the game of Kings and Courts over all Mahommedan Asia. (Vide p. 191 of Hobson-Jobson by Yule and Burnell, London, 1903). In the Middle Ages this game came from Persia to Byzantium sometime

before "the beginning of the 8th century." There are constant metaphors about this game in Persian literature. The fullest description of the game as played at Constantinople is given by Johannes Cinnamus (c. A. D. 1190). It remains to be proved if this game called " quanturel दिनोद " by Somesvara was introduced into India after the Muslim conquest of Sind in A. D. 712 or earlier. At any rate the use of the Stirrup in the game of Polo as played at the Cälukya court about A. D. 1180 is very important as it proves the currency of the stirrup in Indian horsemanship more than 800 years ago.

Another reference to the Stirrup is found in the lexicon राज्यवद्वारकोश (Poons, 1880) prepared by Raghunatha Pandita by order of Shivaji the Great about A, D. 1676. In the section of this glossary or lexicon, which is called चतुरहावया dealing with military terms current in the 17th century we find several terms about the cavalry and horsemanship including the accoutrement of the horses, such as the following with their explanations

in Sanskrit ---

पामा = सम्बरा मिरास्त्रोर = अधरक्षकः हरू = पर्याची शाहतीर = जांधिक रिकेववार = सोमधरः काबाडी = चासबाहरू: मालबंद = सरवबंधकः बन्दशं कि वयामन = ग्रीवायम्बः गड्छोल = निगाल: भौवरकडी = निगालवलयम् समक = शिरोदंशवारणम् पावबंद = पावबन्धः स्वतामा = पाशकः दस्तळा = चर्मनिगढ गास = स्रोप्तिगद सरोधर = प्रोधनमं लगाम = सलीनकम् तक्षान = श्रष्ठीनश्हिम जोगीर = करवाणम्

भीडन = तुरगासनपृष्टम् हुणा = तरगासनश्चवहा पेशबंद = प्रोचन्धः जेर्बन्द = तीक्ष्णतादनी शिकार्वद = कक्षिरउम् साख्ता = अधनपञ्चस फंदणा = सुक्छाः हरदा = मणिः चंग = किन्तिणी सदका = चामस्य जलाजल = पुर:किङ्किणिका सर्वली = जिस्क्षमे छाछे = बोप्तवस्थाम रिकीय = मारोहिणी रिकीयदास = (आरोहिण्याः) समें दमची = प्रवादम्ब तंग = कड्यबन्ध तंगकडी = कक्षिवन्धवस्यम् पुस्तंग = वरत्रा हवासा = प्रस्थितम

जीन = तुरगासनम् दावण = तुरगासनपञ्च सस्तफा = दावणाध्रतन्तवः पासर्गांशा = अस्र स्वचम् स्रगामपटा = असमुसमूपगम् साजा = असमुसकवचम्

In the above terminology the term रिकीच for the stirrup is explained as आरोडिजी i.e. a contrivance which helps a rider to climb up the horse while the मानवीद्वास calls it पादाधार i.e. foot-support or foot-rest. In fact the stirrup not only helps a rider to climb up the horse but also serves as a foot-rest while riding. The words पादाधार and बारोडिजी are evidently coined words as there was no word in the Sanskrit language for this contrivance when the Indians adopted it from foreigners.

There is an illustrated manuscript of the Bhagavata-purana in the Government Manuscripts Library at the B. O. R. Institute, Poona. It contains about 130 coloured illustrations by a Muslim painter. This manuscript was copied at Jodhpur in A. D. 1648. There are pictures in this manuscript representing some battle-scenes with horse-men. These horse-men are shown as using metallic stirrups and armed with weapons like the bow and arrow, swords, lances etc. We may find the pictures of the stirrup in other Indian paintings prior to the 17th century also.

The foregoing evidence proves the use of the stirrup in Indian horsemanship from c. A. D. 1100 upto the present day. As regards its use in India prior to A. D. 1100, I made inquiries with scholars interested in this problem. I record below most gratefully their replies to my letters, which throw a flood of light on the history of the stirrup in India and outside:—

(1) Dr. R. E. Mortimer Wheeler, c. L. E., M. E., Director General of Archaeology in India wrote to me from New Delhi on 7-4-1948:-

"With reference to your letter of the 2nd April; For the stirrup I have no extensive literature here. It occurs quite early, however, in Central Asia and in China, where it is found in the Han and Tang periods. The Sarmatians also used it in the 1st Centuries B. C.—A. D. See for example M. Rastovtzeff, Iranians and Greeks in South Russia, (Oxford, 1922), pp. 121 and 180. I have not yet investigated the earliest occurrence in India but I expect it reached India from the Sarmatians, very likely via the great trade-route to North-West India through the Hindu Kush. It would, however, be a matter of some interest to re-examine early Indian sculptures and paintings with the problem in mind."

(2) Dr. Moti Chandra, M. A., Ph. D., Curator, Art Section of the Prince of Wales Museum, Bombay, in his letter of 30-4-48 sent me the following valuable remarks on the stirrup:— "As far as my knowledge goes there is no representation of the stirrup in the bas-reliefs of Bharhut and Sanchi.

However, a kind of stirrup made by looping a rope appears on the lowest beam of a torana archway in the railing round a stilpa, which was recovered from Kankall Tila, Mathura (The Jain Stupa of Mathura, p. 22, by V.A. Smith, Allahabad, 1901). This railing has been assigned on good grounds by Smith to 100 or 50 B.C. The reverse of the torana beam represents a procession about to visit some sacred place. The horseman heading the procession has his feet resting in a looped rope or may be a leather strap (Pl. XV). There is, however, no sign of iron stirrup as we find in Mugal paintings.

The same kind of looped rope or strap, whatever you may choose to call it, appears on a lota in the Indian Museum discovered by Major Hay in 1857 at Kundlah in Kulu (The Industrial Arts of India, p. 154, Pl. 12, by George C. M. Birdwood, London, 1880). The decoration on the lota is made up of a procession scene, in which there are musicians, a chariot, two horsemen and an elephant.

The horsemen have foot-rests exactly of the same shape as described above. The lota has been dated to 200-300 A. D. but on stylistic grounds it could be dated at least two hundred years earlier.

The sculptural evidence, therefore, proves that such kind of foot-rest was known in India in the first century B. C. but before that it was unknown. We can, therefore, put a suggestion that probably it was an innovation introduced by the Śakas in the first century B. C. It is, however, difficult to say when the regular iron-stirrup was introduced in this country, but as it was common in the Mongolian tribes of Central Asia after the sixth century, as the recent Russian excavations have found out, the Indian stirrup also points out to the same source. In this connection I may also point out to you that in Garhwal hills looped ropes are still used as stirrups. There are some technical words about a horse's equipment in the Harşacarita. Dr. V. S. Agrawal has made special study of them. Some of these words have not yet been explained satisfactorily and may be of foreign origin."

(3) Dr. J. M. Unwalla, M. A., Ph. D. Wrote from Bombay on 30-4-48 :-

"As regards your inquiry about the Stirrup and its invention, I am unable to say any thing definitely. Sassanian bas-reliefs do not show the stirrups used by horsemen. In modern Persian the Arabic word rikāb is used for it. Again the Arabian Nights describes Sindbad teaching peoples of Further India the use of stirrups. This much for Iran.

In Draxt i Ashrik in Pahlavi published by me with translation and notes in BSOS, II, part IV, 1923, p. 655, we have Pahl. saxtak for "riding equipage," Modern Pers. saxt " the girth or surcingle of a horse together with his armour covered on both sides with felt cloth (Steingass); on p. 657-we have Zen," Saddle."

I think the best answer to your questions can be got from funeral clay figurines of horsemen discovered in early Chinese graves many of which form also proud exhibits of several European museums.

We have in our University Library, Max Ebert,, Reallexicon der Vorgeschichte, Berlin, 1924-32 - Bd. XII-Article on stirrup by Eckhard Unger runs as follows:—

'The stirrup was not in use in the Near East (Vorder asien), but the idea of a stirrup was not unknown. We have up to date only one example, that of the Assyrian King Salmanasser III, who is shown using a privisory stirrup, while riding along a difficult stony path near the course of the Tigris on the occasion of consecrating in 852 B. C. His own Rock bas-relief. A board 12ft long and about 1½ foot broad bound with strings, serves him as a support for the feet [s. relic DIJI of the bronze gate of Ingur-Enlil Comp. E. Eckhard, Assyrische in Babylonische Kunst 1927, p. 30, Illustration 41].

This stirrup is thus the oldest stirrup of antiquity. In Europe, the stirrup appears as late as the early middle Ages,"

Dictionairre des Antiquite's classiques might give further information but we have not got it here in Bombay,"

(4) Dr. H. Goetz, Ph. D. Curator of the Baroda Museum and Art Gallery wrote to me on 18-5-48 as follows:—

"As far as I remember the stirrups are closely connected with the problem of heavily armed cavalry. A rider in a heavy armour was not so easily able to maintain his seat on horse-back and, when slipping, more helpless because the weight of the armour, would drag him down as soon as he lost his balance. Stirrups thus were a necessity. Now easily armed cavalry was used especially by the Parthians and the Sassanians. Thus the introduction of stirrups in India must coincide with their rule, over North Western India. Also the Chinese had stirrups, if I remember correctly, already in the Ham times. Thus they must have known them. However, the Guptas did not know them (at Ajanta all horsemen are without stirrups). Also the Rajputs did not use them, at least not before the 16th Century, when the Muslim armour was introduced. But

I should think that the Muslims had them. On Persian Miniatures of the Ilkhani period, at least, stirrups are the rule."

The foregoing remarks about the history of the stirrup in India, Assyria, Central Asia, Arabia, China, Iran, Europe etc. are very informative and helpful in my present inquiry as they give us a very comprehensive historical perspective to the stirrup as a human invention, its origin and development as vouched by historical evidence, much of which is archaeological and consequently reliable. I note below some more notes on the Stirrup which I have gathered during the course of my investigations in connection with this problem:—

(1) The Stirrup in the Khmer or Indo-Chinese Art - 8th Century A. D.

In the Art journal Silpi of Madras for April 1948 there is an article on the "Art of Greater India, Khmer Sculpture" by Mile. Suzanne Karpeles (pp. 373-382). At present the Annamites owing their culture to China form 72 p. c. of their population in Tonkin, Annam, and Cochin China. The Cambodians of Indian leanings are 12 p. c. only while the Lactions are 6 p. c. of the population. The Khmer art is properly the ancient Cambodian art. The pre-Angkorean period of this art extends upto the 0th Century A. D. Many of the Buddhist images belong to this period. At the end of the article we find a photo of "Horsemen Stone panel" from Annam belonging to the 8th Century A. D. The left foot of each of these horsemen is clearly shown as resting in a stirrup of looped rope hanging from the saddle. We may compare this stirrup to that found on the archway at Mathura, assigned to 100 or 50 B. C. as also that on the lota of about 200 A. D. found at Kundlah in Kulu by Major Hay in 1857.

(2) The Stirrup in Turkistan at Dandan Uliq - 8th Century A. D.

Vincent Smith in his History of Fine Art in India and Ceylon (Oxford, 1930) gives a photograph of a wall-painting showing mounted princes or saints, one of whom is riding a horse while the other is riding a camel. The rider of the horse has his left foot in a stirrup, which looks like a metallic stirrup. According to Smith the remains of the 8th Century at Dandan Utiq in which the above painting was found, show Indian influence. The painters followed Indian models but were also exposed to Persian and Chinese Schools of influence. The rider of the horse is shown as riding a piebald Yarkandi pony. The blending of Indian and Chinese features is noticeable in the face of the horseman (See Plate 116 A facing p. 163). This painting belongs to the 8th Century A. D. as Dandan Uliq was abandoned soon after A. D. 791.

(3) The Stirrup in Persia (Rayy)- A. D. 1191 - Arthur Lane in his Early Islamic Pottery (London, 1947) Plate 55 (c), gives a photograph of the Chicago dish dated A. D. 1191. This dish of 14 inches diameter is now in the Metropolitan Museum, New York. On this dish there is a picture of a rider on horseback with his left foot in the stirrup. The stirrup is clearly marked out in the picture and it looks like a modern metallic stirrup. The dish is a specimen of Persian Justre - painted wares current in Persia in " late 12th - early 13th Century. "

(4) The stirrup in Scotland-A. D. 1241-1285.

I have already noted the remark of Eckhard Unger that the stirrup appears in Europe as late as the Early Middle Ages. In this connection I have to note that the seal of Alexander III (A. D. 1241-1285), King of Scotland, shows him riding a horse with his right leg in the stirrup and his uplifted sword in the right hand. This stirrup showed on the seal may be either of looped rope or leather strap (vide p. 573 of Vol. I of Encyclopaedia Britannica, 14th Edition, where the seal is reproduced).

(5) The foreign origin of the stirrup indicated by the evidence recorded in this paper gets further support from the linguistic evidence. My friend Dr. Siddheswar Varma, M. A., D. LITT. has been kind enough to examine this linguistic evidence. He will publish in due course a note on it. In the meanwhile I may record here his tentative conclusion based on the words for the Stirrup found in different languages of the three groups, (1) Indo-Aryan (Gujarati, Sindhi, Hindi, Nepali, Bengali, Marathi), (2) Iranian (Balochi), (3) Dravidian (Tamil, Telugu, Kannada) and (4) Munda (Gondi). In his letter of 9-5-1948 Dr. Varma observes:- " The above list (of words for the stirrup) is far from encouraging and shows how extensive has been the domination of the Perso-Arabic form reaching even Munda-Dravidian, " Dr. Varma has promised to tackle the older forms of the above languages with regard to the stirrup and I await with eagerness his detailed researches in this inquiry.

The evidence regarding the history of the stirrup as recorded in this paper may be represented chronologically as follows :-

Reference S = stirrup. S used by the Assyrian King Salmanasser B. C. 852 III (a foot-board bound with strings). B. C. 1st Century

S used by Sarmatians. A. D. 1st Century

Chronology

S in Central Asia and China (Han and Tang periods).

B. C. 100-50	S at Mathura (in the railing round Jain Stupa) — a looped rope or leather strap.
A. D. 200-300	S on a lota from Kundlah in Kulu. (now in the Indian Museum)
Figure 1	(a looped rope or a leather strap)
A. D. 500 onwards	Use of iron stirrup by Mongolian tribes of Central Asia.
A. D. 700-800	S in a painting at Dandan Uliq in Turkistan (metallic stirrup?)
A. D. 700-800	S on the stone panel of horsemen at Annam (Khmer or Indo-Chinese art) - looped rope.
A. D. 1130	S described as पादाबार of gold (foot-rest) by
	King Somesvara in his Manasollasa (descrip- tion of Polo or Horse golf).
A. D. 1191	S on a Persian pottery dish (New York Museum) (metallic stirrup).
A. D. 1241-1285	S in Scotland (on the seal of Alexander III) (looped leather strap or rope).
A. D. 1676	S mentioned as " frair " and explained as " sirt-
The same March 100	fgoft" by Raghunatha Pandita in his राज-
Applied to be to dear	स्यवहारकोवा composed by the order of Shivaji
The Case of the Ca	AND

The above table speaks for itself. The data recorded in it can be easily supplemented by Indian and foreign scholars on the strength of sources available to them, both literary and archaeological. I am particularly interested in the Indian sources. I shall, therefore, feel thankful if some more light is thrown on this problem from Indian sources, especially prior to A. D. 1000.

P. S.—Since this paper was sent to the press. I received some valuable information about the stirrup from friends in Europe. I have great pleasure in adding it to my paper most gratefully:—

- (1) Prof. Dr. Vittore Pisani of the University of Milan (Italy) writes to me on 10-7-1948 as follows:—
 - (i) The Romans and the Greeks had neither stirrup nor saddle.
- (ii) The first mention of the stirrup is in a treatise of the Byzantine emperor Maurikios (dead 602 A. D.); in the West in the work Etymologiae of the Spanish bishop Fridor of Sevilla (VII century A. D.)

- (iii) The Romance peoples got the knowledge of the attrup from the Teutons as seen from its names in Italian.
- (iv) Whence the Teutons had the stirrup is not quite certain; probably they had it from the Nomads of Asia.
- (v) The Byzantine people may have received the stirrup from the
- (II) Prof. Dr. Gerhard Lindblom, Director of the Ethnographic Museum, Stockholm (Sweden) writes to me as follows, in his letter of 3-8-1948:--

"The best work on stirrups is R. Zschille und R. Forrer, Die Steigbügel in ihrer Formenentwicklung, Berlin, 1896. It is a large work in
folio with good plates and it gives the whole development of the stirrup,
at least in Europe. I will also mention Lefebvre des Noettes, L'Attelage le
Cheval de Selle a travers les ages, Paris, 1931. I think that you will
find a short but good Survey in M. Ebert in Real-Lexicon der Vorgeschichte article "Steigbügel"—The two first-mentioned books are owned
by the library of the Royal Armoury here. Dr. H. Seitz of this institution knows a good deal of stirrups himself. He gave me the titles of the
two books mentioned above."

(III) Prof. Dr. V. L. Grottanelli, Superintendent of the Museum of Pre-historic Antiquities in Rome (Italy) writes on 11-5-1948:—

" I am truly in admiration at your great activity and at the vastness of the field covered by your investigations and researches. I enclose a few lines on the subject of stirrups:-

Encyclopedia Italiana, Vol. XXXII, Rome, 1936, p. 446, under "Staffa" (by Lt. Col. Carlo de Margherita)

"....The ancients must not have known the use of stirrups, because Xenophon does not mention them in his works, whereas Galenus and Hippocrates speak of the ailments which horsemen suffered of in their legs owing to the habit of leaving them hanging and loose. Stirrups are mentioned for the first time in a treatise by emperor Mauritius who died in 602 (A. D.).

At first stirrups consisted of cords made of rich materials (textiles); later on they were made of metal....In the XI century the use of stirrups was already common among men of arms, though not universal; some horsemen in order to climb on their horse still used a peg inserted in their lances 'staff...."

(The work of Xenophon to which the author refers to was written between 864 and 861 B. C. The use of saddles preceded of course, as has

been the case in every part of the world, that of stirrups. The idea of a saddle was probably suggested to the Greeks by the Persian custom of heaping blankets on the horses' backs; a cushion eventually took the place of these blankets, but it is only in comparatively late times that a real saddle was developed. In the Roman cavalry of imperial times, saddles reached a high stage of perfection, but as stated above stirrups do not seem to have appeared before, let us say at the end of the VI century. (Montandon, L'ologenese culturelle, Paris, 1934, p. 205-206, says that the saddle and stirrup appeared both in the IX century, but he is obviously wrong). Oddly enough, I have seen no conclusions drawn, or even hypothesis put forward, as to the origin of stirrups. The Chinese used them in the VII century, and as far as we know not before this time, so that apparently stirrups were known or at least heard of in Byzantium at an earlier time. Persian influence again? As soon as I have time I shall look into the matter. You have chosen here a most appealing subject for research, and no doubt your contribution will be a precious one).

Besides the above information about the history of the stirrup in Europe I have found the following account of the discovery of iron stirrups in a temb of 5th century A. D. in South Korea:—

In the Quarterly journal Artibus Asiae (Switzerland) Vol. X/3 there is an article on an excavation at Kyongyu, a town in South Korea. This article deals with the excavation of two tombs (c. 5th century A. D.), one of a noble and the other, probably of his wife. Figures 17-19 give us photographs of the Horse-furniture found in one of the two tombs, which is called "Ho-ou" Tomb. The items of this furniture as recorded on pp. 182-188 of the journal under reference are as follows:

- (1) One pair of gilt bronze saddle bridges
 - (2) Nine small bronze horse-bells
 - (3) One strap pendant
- (4) One pair of iron stirrups
- (5) Several fron bits
 - (6) Three gilt bronze horse masks
 - (7) Many bronze strap ornaments.

These items of horse-furniture of the 5th cent. A.D. show the highly developed condition of horse-furniture about 1500 years ago in the Far East. We must trace the history of Indian horse-furniture with a view to seeing what items of Indian horse-furniture have been borrowed from foreign countries in contact with India in ancient and mediaeval times of Indian history.

6. The History of The Sling (Gophana) in India And Other Countries

Between C. B. C. 3000 And A. D. 1900

In the article on Sling in the Encyclopaedia Britannica, Vol. 20 (1929), p. 797 we get a history of the Sling but it makes no mention of the history of the Sling in India. I propose in this paper to record some references to the Sling in Indian literary and other sources but before doing so it is advisable to record briefly the history of this implement as given by other scholars. The following points in the above article in the Ency. Britannica are noteworthy:-

- The Sling is probably the earliest device by which force and range were given to the arm of a thrower of missiles.
- 2. Sling stones from the stone age are frequent.
- 3. Two kinds of Sting were used :-
 - (i) Sling with a leather socket or strap with two cords attached to it.
 - (ii) The staff Sling in which the Sling is attached to a staff beld in both hands and used for heavier missiles thrown in siege operations during the middle ages.
- 4. There are many references to Sling and Slingers in the Bible; the left-handed Slingers of Benjamin were famous (Judges xx. 16).
 - 5. The Assyrian monuments show the Sling of the ordinary type.
 - Slingers were used in the ancient Egyptian army but not before the 8th century B. C.
 - 7. The Sling is not mentioned in Homer.
 - Herodotus (vii. 158) speaks of the Slingers in the army offered by Gelon to serve against the Persians. It seems to have been a weapon used by barbarian troops.
 - 9. The Acarnanians were expert Slingers (Thu. c. ii, 81).
 - The Achaeans were also expert Slingers. They invented the Sling which discharged a shaft with an iron bolt head (Livy xlii, 65, from boltbins).
 - 11. In the Roman army by the time of the Punic wars the Slingers (Funditores) were auxiliaries from Greece, Syria and Africa.

^{*} Journal of S. M. Library Tanjore, Vol. X (No 1), pp. 18-21.,

- The Balearic islanders in the Hannibal's army were always famous as Slingers.
- 18. In the mediaeval times the Sling was much used in the Frankish army, in defending trenches.

14. The Staff-Sling was used against fortifications in the 14th century for throwing grenades.

The above remarks try to depict the history of the Sling from the stone age onwards and consequently give a good back ground to my present study.

While I was studying this problem my ever-obliging friend Dr. Gerhard Lindblom presented to me the following papers on the Sling published by him as Director of the Ethnographical Museum of Sweden, Stockholm:-

- Die Schlender in Afrika and Anderwarts, Stockholm, 1927, by K. G. Lindblom. In this monograph on the Sling the author indicates its distribution and use in Africa (with map of distribution), together with a brief survey of its occurrence in other parts of the world.
- 2. The Sling, especially in Africa (Additional Notes to a previous paper) by K. G. Lindblom, Stockholm, 1940. This paper contains very valuable information abut the Sling and especially its history in the near Orient and southern Europe. The following points in this paper are noteworthy:—
- i. In Africa the Sling is used in four different ways:— L as a weapon of war, 2. as a hunting implement, 3. for scaring away marauders, particularly birds from the ripening fields, and 4. as a toy for children.
- ii. The Persian King Darius used the Sling as a weapon of war against Alexander. Cyrus reserved the Sling for prisoners and slaves.

 The Persian Slingers used nothing but stones for missiles. In modern Persia and Mesopotamia Slings are used as weapons of war by Arabs and Bedonins.
 - iii. The use of the sling as a weapon by Hittites is authenticated by pictures.
 - iv. The Assyrians and Babylonians used the Sling as a weapon. The Assyrian reliefs show the pictures of Sling.
 - v. Among the ancient Hebrews the Sling was used as weapon for herdsmen, for war and hunting. There were expert Slingers among the tribe of Benjamin (Judges XX. 16).

- vi. According to Pliny the Sling was a Phoenician invention (Hist. Nat. VII, 57). The Phoenicians are described as expert users of the Sling as a weapon.
- vii. Bedouin boys in Arabia use the Sling with great precision.
- viii. According to Varthema the Bedouins of Yemen anciently used the Sling as a weapon.
 - ix. Fig. 1 (on p. 8) is a photo of a Silver vase found at Mycenae depicting the siege of a town, whose defenders include Slingers.
 - x. In Greece and Crete the Sling is a weapon of remote antiquity (Fig 1). The Sling was known even in Mycenean times as proved by the silver vase referred to above.
 - xi. As early as the 5th century B. C., Sling projectiles of metal (bronze and lead) were used in Greece on the battle-field of Marathon. A number of these projectiles have been recovered. The Greek Sling-bullets are of slight volume with excellent ballistic properties surpassing even the bow in this respect.
- xii. In ancient Greece the Sling was largely used by the mountain peoples that supplied the best Slingers.
- xiii. According to Thucydides the Acharnians, the Actolians, the Thessalians, and Achaeans were reputed for outstanding skill in the use of the Sling.
- ziv. Philip V of Macedonia had 300 Achaean Slingers in his service.
- xv. The Greek cities had mercenary Slingers who by their "fire" prepared for the attack of heavy infantry (the hoplites.). Their action was just like the modern artillery fire before infantry attack.
- xvi. Fig. 2 on p. 9 is the picture from a fresco in a grave at Corneto in Italy showing the use of the Sling for bird-hunt. It also shows a man on the shore killing a water fowl with a Sling. This and other frescos show that the Etruscans used the Sling as a weapon for fighting and for hunting.
- xvii. According to Daremburg et Saglio, the Romans employed Slingers (funditores) in the republican era. Hannibal employed Slingers from the Balearic islands. To fight against these Slingers the Romans themselves imported Slingers from Sicily and from these islands as mercenaries. These mercenaries fought against the Gauls. Pompey and Caesar employed Slingers in their African campaigns.

- xviii. Diodorus, Strabo, and Vegetius (in his book on the art of war) describe these expert Slingers from the Balearic islands. According to Diodorus these Slingers threw stones, which smashed helmets, armour and shields.
 - xix. Kings of Numidia (modern Algeria) had Slingers in their armies. The Roman army in Spain employed Slingers at the seige of Numantia.
 - xx. The Carthegenians used the Sling in defending their for-
 - xxi. Opinions differ as to whether the Slingers depicted in Beni Hasan were Lybians.
- xxii. The Sling was known to the ancient Egyptians. Fig. 3 on p. 13 is the photo of the remains of two plaited linen-thread Slings found in the tomb of Tut-Amkh-Amen (14th cent. B. C.) in the toy-chest of this King.
- xxiii. Possibly the Sling came to Africa from the ancient cultures of the Near East and from the early Mediterranean culture in general.
- xxiv. It is very probable that the Sling spread from Southern Europe over the continent. The Goths did not possess the Sling when in A. D. 533 they invaded Italy. The use of the Sling for protecting growing crops from birds is vouched by a woodcut of A. D. 1502 (edition of Virgil, Georgia, Nuremburg).
 - xxv. In Asia the Sling is used by 1. the mountain-people of Southern Pamir, 2. the Bhils, 3. the Gonds, 4. the Juangs of Orissa, 5. the Tibetans, 6. the peoples culturally related to the Tibetans.
- exvi. Sir Aurel Stein discovered a Sling in the ancient Tibetan fort of Miran. It is of goat's hair-cord and felt pouch and belongs to about the 9th cent. A. D.
- xxvii. J. S. Thomson gives an interesting account of the use of the Sling in China in the province of Kwanlung. Stone-throwing contests were held in this province as also in Korea.
- xxviii. In northern Asia the use of the Sling has been noticed and recorded by many writers.
 - xxix. The use of the Sling in Indonesia (Sumatra, Java etc.) has been noticed and recorded by some scholars.
 - xxx. The occurrence of the Sling in the Philippines has also been referred to by some writers.
 - xxxi. The Sling exists (or formerly existed) in many parts of America.

xxxii. Possibly the original home of the Sling may have lain among the early cultures of the Near East and thence it spread over the world.

In the foregoing information about the Sling we find no references to the history of the Sling in India. I record below such references with a view to supplementing the exhaustive study of the Sling made by foreign writers on the subject:—

- 1. At present the Marathi word for the Sling is भोरूज (gophona). Let us see if this word is traceable in Sanskrit sources. In verse 5 of chap. 72 of the Bhişma parvan of the Mahābhārata we find the word "Bhindipāleşu चित्रपालेषु." Devabodha, the earliest commentator of the Mahābhārata explains this word to mean "भोरूजेषु " (see p. 25 of Devabodha's जानभीरिका commentary ed. by S. K. Belvalkar, B. O. R. Institute, 1947). One Ms of this commentary gives the variant 'भोरूजेषु ' for 'भोरूजेषु,' We are, therefore, unable to say if Devabodha knew the word भोरूज,
- In the Adiparvan of the MBH (B. O. R. Institute) Edition, chap.
 verse 24 reads as follows:—

" अयःकणपचकारमञ्ज्ञुण्ड्युधतवाहवः । कृष्णपार्थे विषासम्तः त्रोधसंस्टितोतसः ॥ २४ ॥ "

The word TRITH occurring in the first line of the above verse is recorded by Monier Williams in his English Sanskrit Dictionary, p. 381. He translates it as "a Sling for throwing Stones." Dr. Sukthankar puts a wavy line under the words "TRITHING." We are, therefore unable to rely upon the word "TRITHING." as authentic in the text of the MBH.

Nilakantha Caturdhara (c. A. D. 1650-1700) comments on the above passage (see p. 357 of the Chitrashala Edition, Poons, 1929-Adiparvan) as follows:-

" तथा चकाइमसंज्ञं यस्य अभिवलेन महान्तोपि पाषाणा अतिद्रे क्षिप्यन्ते तस्काष्ट्रमयं यन्त्रं भुखण्डी चर्मरञ्ज्ञमयं यन्त्रं पाषाणक्षेपणभेष "

According to Nilakantha ৰক্ষাইন was a wooden machine for hurling big stones while মুম্বার্থী was made of leather and ropes and used also for throwing stones. Does he mean that মুম্বার্থী was a Sling made of leather and ropes?1

3. In the Susruta-Samhitā (Sūtrā-Sthāna, Chap. 18, passage 18-N. S. Press edition, 1931, page 83) we find 14 kinds of bandages for wounds, among which a bandage called "前来啊" is mentioned as follows:-

^{1.} I am thankful to Dr. M. M. Patkar of the Deccau College Research Institute for supplying these references to me.

" विद्वकतात्रीकांसवरितपु लोकाता." This bandage was called " गोकाला" as it was of the shape of लोकाल or Sling and could be tied up properly on the chin, lips and such other protruding parts of the body on which a flat bandage could not be properly tied up. The commentator Dallana (c. A. D. 1100) quotes the following verse from an earlier work to explain the term " गोकाल " in the Suirntasamhitā:—

" पाषाणगुडकोरक्षेपकारिणीं गोफणो विदुः । तराकृति भिषदकुषाँद्रोक्तणो पन्त्रकरियभि: ॥ "

नोपला is capable of throwing stones and a bandage of the shape of नोपला or Sling should be prepared by the physician etc.

The editor of the Susruta Samhita Vaidya Jadavaji Trikamji Acharya quotes the following verse of was about always bandage in footnote 1 on p. 83:-

" गोफणां गोफणाकारां युज्याबासोष्ट्रबह्तिषु । चित्रुके बापि पञ्चाङ्गी इनुसन्धी विसंगते ॥ " etc.

It is clear from the above references that the word 'nivent' meaning a Sling was current in the time of the Sušruta Samhitā and that it meant a Sling for throwing stones. Apre in his Sanskrit English Dictionary (1890, p. 468) records the word niven with the following meanings:—(1) a bandage hollowed out so as to fit the chin or nose, (2) a Sling, but does not record any usages of this word,

4. In the Astangahrdaya | 8th or 9th century A. D.) of Vägbhata (edited by Harishastri Paradkar, N. S. Press Bombay, 1939) we get references to "सोक्सलायन्त्र" as follows:—

Page 871 -

" कार्यक्ष गोएफणाबन्धः कटवासावेदय पहरूम् । " (verse 25)
" चर्मणा गोएफणाबन्धः कार्यक्षासंगते अगे ॥ " (verse 28)

The " गोरकणाबन्य " mentioned in these verses is identical with the "गोरूणाबन्य " of the Suśrutasamhitā.

5. In the Cikitsasthana of the Susruta Samhita we get the following reference to the गोफाणकायम्ब which is identical with the गोफणायम्ब referred to in the Sutrasthana, chap. 18, passage 18:—

Page 857- chap. 2 verse 67 बर्णाचिक्तिस or treatment of wounds.

" प्रवेदय तुषसेवन्या सुर्की सीव्यंत्ततः परस् । कार्यो भोफणिकायन्यः कटयामावेदय यन्त्रकस् ॥ ६७ ॥ "

The commentator Dallana observes: — 'गोफनिया कीवीनं करछोटक इस्तवं:'.

Here Dallana equates नीपाणिका with कीपीन i.e., a piece of cloth worn over the privities, which is practically the same as कच्छोटक i.e., the end of the lower garment tucked into the waist band or girdle (over the privities) (Marathi कालोटा). Evidently the कीपीन is of the shape of a Sling.

6. In the Brhatkalpasütra (Shri Jain Atmanadasabhā, Bhavanagar, p. 1813) we get the word " नोप्कण " in the following extract:--

" कुषणयसादी भेदो, धंसण मणिमादियाणकट्टादी । पहनरादी पीसण गोष्कण- घणुमादि अभिघातो ॥ ४९०५॥ "।

टीका ... "'गोफणा' वर्मद्वरकायी प्रसिद्धा तया, धनुःप्रमृतिभियो यन् प्रक्षिपति पृपोऽभिषात उच्यते ॥ ४२०५ ॥ "

According to my friend Mani Panyavijayaji, who has kindly supplied to me the above reference the above Sutra belongs to the 6th century of the Vikrama era,

7. Chapter XVIII of Book II of the Arthasastra of Kautilya (Vol. I, edited by J. Jolly, Lahote, 1923 pp. 60-61) deals with the duties of the Superintendent of Armoury (आयुवासाम्बद्ध). The following line (p. 61) records some of the weapons:—

" बन्द्रगोध्यमम्ष्रियाषाणरोचनीदपदश्च चायुपानि । "

The translation of this extract given by Dr. Shama Shastri is as follows:— "Yantropāṣāṇa, Goṣpaṇapāṣāṇa, muṣṭipāṣāṇa, rocanl (millstone) and stones are other" (see p. 112 of Eng. Trans. of Arthaiāstra, Mysore, 1929).

In the footnotes we get the explanation of the first three terms in the

- 1. यम्मदायाण = Stones that can be thrown by a machine.
- 2. गोव्यणपापाण = Stones thrown by a rod called गोव्यण.
- 3. मुख्यापाण = Stones hurled by hand.

All these explanations are based on the commentary.

Can we identify whom with whom? If whom was a rod for throwing stones against the enemy we can suggest that it may have been a kind of "Staff-Sling" described in the Encylopaedia Britannica. In the Staff-Sling the Sling is attached to a staff held in both hands and used for heavier missiles thrown in siege operations during the middle ages.

^{2.} The rablet word for Sling is Kopis. In Pahlvi Vendidad (Eng. Trans. by B. T. Anklesaria, Bombay, 1942, p. 302) the impliments of a warrior are mentioned vis. Spear, Knife, mace, bow, middle with quiver, and Sling (Kopis.). Can we connect Sans. 4 141-1 with Pahlvi Kopis.?

^{2.} I am grateful to stuni Punyavijayaji for this reference.

I await more light on this point from linguists and Sanskrit scholars in general who may have studied the text of the Arthaidstra more closely than myself. The word i nitequ's occurs only once in the text of the Arthafastra. The words गोफण, गोफणा, गोफणिका, गोफ्फणा, गोफ्फण, are not mentioned in the Arthaiastra.

8. In the Marathi work " Jalanesvari " composed in A. D. 1290 we get a reference to gophana (Sling) in the following extract:-

ं हीडाइसळे खेळणे। पुश्यमाना झेळण। न करी महणे गोफर्ने । ऐसे होईल ॥ ८४ ॥ "

(Chap. 13, ovi 84 of Franc'svari ed. by S. V. Dandekar, Poona, 1953, p. 432).

A person practising signi (non-violence) does not whirl by his hand a lotus flower or garland of flowers with the apprehension that it may injure some one in the manner of a gophana (Sling), 1

9. References to expert slingers used in their armies by Indian kings have not come to my notice. Emperor Akbar, however, employed such slingers as stated in the Ain-i-Akbari (c. A. D. 1590) (Eng. Trans. by Francis Gladwin, Vol. I, Calcutta, 1897) -

Vol. I, Page 178 ---

"The Pehlwan are wrestlers and boxers of Iran and Turan. There are also expert Slingers of Gujarat and other parts of Hindustan, who are called Mull, numbers of whom are in His Majesty's service. Their monthly pay is from 70 to 450 Dams and every day some of the above combat together and receive various rewards. "

10. There is a work called सभाजकार (Sabhā Srāgāra) represented by a rare MS in the Govt. MSS Library at the B. O. R. Institute (No 671 of 1809-1915 . Folios 22) dated Samual 1781 = A. D. 1725. This work contains list of words useful for a courtier. On folios 12-13 we find a list of the following towns :--

बारारों (Agra), उजेण (Ujjain), उदेपुर, आवेर, बातसेर, अहमदाबाद अवस्मा-बाद, देखि, दोळताबाद, द्रीयाधाद, दीय, दसीर, गोधा, गोलकुदं, (Golkonda) लाहोर, लयभीपुर, बहांनपुर, विजापुर, सुदि, राजमहरू, राजनगर, जागनगर, (Hyderabad) यमाति (Khambayat), सुरनि (Surat), पाष्टण, पटणु, जेसलमेर, विकार, सांगानर, बांधपुर, वालोर, नागीर, मलकापुर, सुरादाबाद, सारवादाबाद, फत्तीवाबाद, फत्तेपुर,

As Ahmedabad was founded in A. D. 1413 (see p. 235 of Bombay Gazetteer Vol. I, Part I - History of Gujarat, 1896), we may put A. D. 1418 as the

I. I am thankful to my friend Prof. V. G. Maydeo for drawing my attention to this only reference to gophane in the Jiliaufports 12

earlier terminus to the date of Sabhā-śṛṅgāra, which mentions Ahmadābad in the list of towns. If the town saturate mentioned in this work is identical with any town of this name founded by or named after Emperor Aurangzeb, who came to the throne about A. D. 1659, we can fix the date of the Sabhā-śṛṅgāra between c. A. D. 1659 and 1725.

The Sabhā-śṛṅgāra, the chronology of which has been indicated above, mentions ' गोफ्ल' (Sling) twice as under :—

Folio 5 b - Names of weapons (आयुध). Here गोफण is mentioned as an आयुध or weapon along with इयनाङ, हवाई, नाङ, गोङो, etc.

Folio 8 b - Description of battle (ब्रद्भणांत). Here also गोरूण is mentioned.

11. The lexicon Kalpadrukośa (A. D. 1660), Vol. I. Baroda, contains a reference to गोपल in the following line:—

Page 124 ---

" भुजुण्डीशङ्कसुसलस्तरु गोफण पत्रणः ॥ ३३३ ॥ "

It is worthwhile searching for the word जोपल in the numerous Sanskrit lexicons published or unpublished.

- 12. In the Marathi Śabdakośa by Y. R. Date and C. G. Karve, Poona, 1934, Vol. III, p. 1029 we find the following references to gophana (Sting):-
- (i) Kathākalpataru by Kṛṣṇayājflavalkya (c. A. D. 1548-1618 -see
 p. 256 of Madhyayuglaa Caritrakośa by S. Chitrav, Poona, 1987)

" द्वार्ती बेबोनि गोफणा " कथा ६, १२, ५३,

(ii) Harivijaya by Śrīdhara composed in Śaka 1624 = A. D. 1702 (see p. 561 of Mahūrāşīra Sārasvata by V. L. Bhave, Poona, 1951 and p. 196 of Śrīdhara Caritra by C. N. Joshi, Poona, 1951).

" एके चितामणि गोफणिला । तो येऊन अंगणीत पडिला "

We have already noticed the earliest reference to gophana in the Jianeswari (A. D. 1290), It is possible to find many more references to gophana in Marathi literature between c. A. D. 1100 and 1900.

Regarding the use of the Sling in China I consulted my friend Prof. Dr. L. Carrington Goodrich of the Columbia University, U. S. A., now in India. He wrote to me from Ceylon on 19th May 1954 as follows:— "C. N. Bishop, The Neolithic Age in Northern China, Antiquity, December 1953, p. 897 writes.—

"Stone and clay balls are numerous. Possibly the smaller ones were missiles for the pellet bow, known in very early China. The larger specimens may have been Sling Stones. The Chinese Sling used as a weapon of war in recent centuries and still surviving as a child's toy, consists essentially of a cord or thong attached to a short handle."

H. G. Creel The Birth of China, does not mention Slings.

The end result is that we know very little about Slings in early times in China, "1

I hope the history of the Sling as recorded by me in this paper would create some interest in the minds of the serious students of Indian cultural history regarding this earliest device of man. In particular I have to request them to record all references to the Sling in India prior to c. A. D. 500.

A LAND OF STREET OF STREET

About the bistory of the Sling in China I consulted another friend Dr. T. K. Cheng of the University of Cambridge (England). He also finds it difficult to locate references to the Sling in Chinese sources but has promised to keep my query in mind.

7. Hari Kavi's Contribution to the Problem of the Bhavani Sword of Shivaji the Great *

In 1924 Mr. S. M. Edwards contributed a note on Shivaji's Sword "Bhavani" to the Indian Antiquary 1 which he concluded with the following appeal to scholars:—

"The question still remains 'where is now the original Sword Bhavani?' In view of what is written above and of the fact that the Sword now worshipped at Satara is the Sword of Shahu, can any reader suggest a solution of the problem? Could the Sword have been taken to Benares when the Raja retired thither after his deposition? Has it been hidden to reappear at some future date as the symbol of a united Maratha people? Perhaps some one of the leading students of Maratha history may be able to answer the question."

ealy/years files this patenting

^{*} New Indian Antiquary, Vol. 111, pp. 81-100.

I. Vol. Lilli, 1924, pp. 18-20-References to the Bhavani Sword recorded by Mr. Edwards are as follows:--

Sivadigvijaşu Balbar (reference translated by Dr. Surendranath Sen on p. 181 of his translation of Sabhased Bakhar.

⁽²⁾ Grant Duff's History of the Marathas Vol. I. Oxf. Univ. Press, 1931, p. 280-Grant Duff states that the Bhavant Sword" is still preserved by the Raja of Satara." On p. 244 (Vol. 1) he mentions that Sambhaji carried the sword during the Maratha attack on Gos in 1683 and that be did great execution with it. On p. 243 (Vol. 1) he states that two ewords vin. (1) the Bhavant Sword and (2) the sword of Afsallohea of Fijapur had been taken by the Mughals at Raigarb. These were given as presents to Shahu by Aurangash when Shahu's nuptials were colabrated by the Emperor. Both these swords as well as the third sword personally presented to Shahu by Aurangash were in the possession of the Raja of Satara at the time Grant Duff published his history in 1826.

⁽³⁾ Mr. D. B. Parasnis informed Mr. Edwards that the sword primerved at Satara is 5'-9" in length in the blade and 8" long in the handle and bears a Marathi suscription." Setmant Sarkhe Rajmandal Raja Shahu Radim Accal", which shows that it is the weapon of Shahu. Parasnis further informed Mr. Edwards that there is a belief at Satara that the original Bhavani Sword was taken by Tarahal, wife of Rajaram to Kolhapur and that in 1875 this sword was presented by the Diwan of Kolhapur to H. M. the late King Edward. It was exhibited in 1878 at the Paris exhibition (vide p. 68 of Handbook of the British Indian Section of this exhibition by Sir George Birdwood). Mr. Edwards made inquiries in England about the above sword the result of which rendered it certain that the Bhavani was never taken to England.

⁽⁴⁾ Pratap Singh, the Raja of Satara, presented General Lionel Smith with a sword in A. D. 1820 with the approval of the then Governor of Bombay. Mr. Edwards rejects Parsents' suggestion that this sword may have been the Bhavani sword.

In view of this appeal made 14 years ago by the then editor of the Indian Antiquary and finding that no effort had been made by scholars to examine the whole problem of the genesis and historicity of the Bhavani sword I was tempted to make some notes about this problem and make my own contribution to it, howsoever slight, though I don't claim to be a 'leading' student of Maratha History. In these notes I have tried to gather what has been said about the Bhavani sword by some of the previous writers on the subject with a view to indicating the stage at which the problem stands at present. Thinking that these notes may be of use to other workers in this field I am publishing them after waiting for full two years (since this paper was first drafted) with a view to get the benefit of exchange of views with senior workers in the field.

In the Shivaji Souvenir² published on the occasion of the Ter-centenary of the Maratha King, Shivaji the Great, we find photographs of four panels of Shivaji Memorial prepared by the celebrated sculptor, V. P. Karmarkar (facing p. 98 of English Section of the Souvenir). One of these panels contains the picture of Goddess Bhavani with eight arms presenting a sword to Shivaji Maharaj, who is shewn at her feet with face towards the goddess and receiving the sword with both his hands. Mr. H. George Franks interprets this panel by putting the following words on record as coming from the mouth of the Great Shivaji:—

"I received that famous sword very early in my career as a token of a compact with the Chief Gowalkar Sawant. It has been suggested to me on my way to the place where it was being kept that I should take it by force, but remembering what tremendous storms are sometimes raised by unnecessary trifles, I thought it better to leave it to its owner, especially as its possession was not a matter of life and death to me. In the end the wise

^{2.} Edited by G. S. Sardesai contains an English section which includes (1) the Jedha chronology (2) the Jedha karena (3) And the Bhonsaics Kahatriyan I (4) Shivaji and the Postuguese (5) Original documents.—Shahaji's letter to Ali Adil Shah, A Persian Pirman, Shivaji's letter to his father, Shivaji to Maloji Ghorpade, Shivaji to his officers, etc. (6) Shivaji's letter to Jayasinha, etc., and a Marathi-Hindi Section including (1) Kavi Bhushan (2) Shivabāwani (3) Maratha Ports (description) (4) Maratha Ports (siphabetical list) (5) The birth-date of Shivaji (6) Historical documents and letters: Shivaji's letter to Baji Prabhu, Jijatai's letter, Treaty between Shivaji and Portuguese, etc., (7) Commercial policy of Shivaji, (8) Some old arms and their history (2) Meeting of Shivaji and Chhatrasal (10) Life sketches of Shivaji's contemporaries, etc.—This volume was published on 3rd May, 1927. It contains the following Illustrations:—(1) Shivaji on horse-back (2) Aurangeeb in old age (3) Ambarkhana at Panhalgad (4) Shri Bamdas (5) Kalyan gate of Shibagi and Shah Jahan (10) Bust of Shivaji (11) Some Marathi letters reproduced.

chief brought the sword to me as a sign of amity even when he knew that its purchase-price was not to be measured in blood. From that day onward the sword, which I reverently named after my tutelary deity Bhavāni always accompanied me, its resting place when not in use generally being the altar of the goddess, to be received back from her as a visible favour from heaven always on the Dasara day when setting forth on my campaigns. I am told that the sword is now at Satara, but I am afraid that I cannot verify it until I can see it to identify it. The fine Genoa blade 3 feet and 9 inches in length, might, in fact, be my other favourite sword which I called Tulja presented to me by my father."

I am not aware of the authorities on which the above journalistic description is based but it may be taken to be an upto date summary of the history and tradition associated with the swords of Shivaji the Great. I am concerned it this paper with the sword known as the Bhavāni sword and hence shall try to put on record references to this sword from contemporary and subsequent records which may reveal the high value attached to it on account of the successive and successful feats of bravery and personal adventure which mark the entire career of this great hero.

In the Maratha Chronicle composed by Malhar Ramrao Chitnis in A.D. 1811 we find the following passage referring to the Bhavani sword:—

- 8 Mr. Y. B. GUPTE has reproduced an original letter of Shivaji addressed by him to his step-brother Vyankoji which begins with " श्रीमहादेव श्रीतुलका भवानी." It appears from line to of this latter that Shivaji was conscious of the favour of his deity in all his operations against the Muslims. This line reads as follows:— " दुसरा विचार करावा होता की, श्रीदेवाची व श्रीची कृपा त्यावरी पूर्व जाली आहे. दुसर तुक्ताला ते मारितात etc." (Vide इतिहाससमह (October, 1915) Vol. VII, Nos. 1, 2, 8 (ऐ. स्कु. ले. २).
- OL Jayarāma Kavi (A. D. 1653-58) Radhāmādhavavilbsa Campū (VI Ullisa) p. 297— '' तुलबाभवानी श्रीमत्पांडरंगं च.....नुला ''
- Life of Shivayi the Great in seven chapters by Malhar Ramrao Chitnis, edited with coplous notes, critical and explanatory, by K. N. SANE, 1924 (A. B. Press, Poons). Some other chronicles partaining to the Maratha History are;—
- - (9) विमगुसबसर composed about 1700.
 - (8) 阿南南南南湖 Ed. by. P. B. NANDURBARKAB and L. K. DANDEKAR. (Baroda, 1895).
 - (4) The Raigarh Life (Original Marathi text lost). English trans. pub. in G. W. FOR-REST'S Selections, etc., from the letters in the Bombay Secretarist, Maratha Series, Vol. I, (pp. 1-22), 1885.

Page 184 — " महाराजानी सफाई करून ' तुम को बड़े और पठाण, बाब हमारी भवानी क्षिवाजीकी देखी ' म्हणून तरवारीचा वार खांपावर केटा. "

In the above extract which describes the Afzakhan incident in Shivaji's life we are told that Shivaji retaliated to Afzakhan's attack by giving a stroke of his sword with the words: "you are a big person besides being a Pathan; just have a taste of this Bhavani (sword) of Shivaji". The account of this Afzakhan incident states that Shivaji carried with him the tiger's claws (vāgh nakha) and a bichvā (a small dagger). If these details are true to history it may not be true that Shivaji had with him on this occasion the Bhavāni sword referred to in the Chitnis Bakhar. It may also be difficult to presume the identity of the bichvā with the Bhavāni sword. Leaving it to specialists to settle these questions we may feel satisfied by only noting the reference to the name Bhavāni (sword) in the Chitnis Chronicle of A. D. 1811.

Another chronicle which gives exhaustive information, about the Bhavani sword is the "Śri Śivadigvijaya" published at Baroda in 1895. Dr. Surendranath Sun in his Śiva Chhatrapati translates the account of the Bhavani sword appearing on pp. 854 ff. of the above edition of the Śivadigvijaya as follows:—

The Bhavant sword "S. D. [154] the Savants had an excellent dhop tarwar (a long and straight sword) worth two hundred Hons. Shivaji wished that such a famous sword should be with him. But it is not proper to wish for a good thing that belongs to one's Sardars [155] or a neighbour of rank.

**The Mahārājā wished to have the sword but it would bring him disrepute as the precedent showed,—and so the Mahārājā observed that the matter should not be even spoken of ;—as in another age such a cause had resulted in the slaughter of many. * * But the sword that had divine properties addressed the Mahārājā in a dream — "If thou goest to fight with me in thy hand even at the head of a small

An English translation of Taroth-i-Shiraji is published by Sir Jadunath SARKAR in Modern Review -- March 1907.

^{5.} Vide Seea Chhairapais. Vol. I, Calcutta 1929 by Dr. Surendranath SEN. Sicadigerijapa is the most voluminous of the three bakhars vis. (1) the Sabhāsad bakhar (2) the Chitnis
bakhar and (3) the Sicadigerijapa. Its authorship is shrouded in mystery. Its author was a
Prabhu Kāyastha according to Dr. SEN, but not Khando Balla) as the editors suppose.
RAJAWADE thinks that the author was some solou of the Baroda branch of the Chitnis family.
Its language is at times very modern. RAJAWADE thinks that the bakhar is a revised edition
of an old bakhar. Sir Jadunath SARKAR, thinks that it is the revised edition of a new lost
bakhar of which Tarikh-i-Shiebji is the Persian remiering. Its date is uncertain. RAJAWADE
supports the date 1818 suggested by Mr. Shankar Balakrishns. (pp. 288-259).

force against a mighty army the enemies will be routed and victory shall attend thee. Do not give the sword back, keep it always near thee and duly worship it." That very night the Sāvant heard the following behest in a dream—"Give the sword to the Mahārājā and secure his friendship thereby. Otherwise thou shalt lose thy kingdom. I shall no longer stay with thee and I am going away." The Sāvant assembled his officers and related all about the dream. With the counsel of all, it was decided to secure the friendship of the Mahārājā by presenting the sword. Accordingly the Sāvant came to see the Rājā and presented the sword to him. It was named Tuljā Bhavānī".6

In the picture of Shivaji reproduced by James Donglas, we find Shivaji seated on horse-back in full attire holding the reigns of the horse in the left hand and a straight sword blade extending from its handle firmly grasped in the right hand. This sword blade appears to be the earliest pictorial representation of Shivaji's sword. Can it by any stretch of historical imagination be identified with the famous Bhavani sword the subject of so much description in the Śiradigvijaya quoted (in translation) above?

In the Shivaji Souvenir volume (1927) we find a very exhaustive article on Historical Weapons by Prof. Manikrao of Baroda (pp. 138-153) in which he states that the Bhavani sword of Shivaji was sent to King Edward by the Maharaja of Kolhapur and that it is preserved at the Buckingham Palace in a golden cupboard. He also expects its return to the Indian soil and exhorts the historical research scholars to collect all possible information about this sword (p. 150). He then gives us a description of this sword in detail such as – two deep lines or grooves on both the sides; golden decoration on the steel parts of the handle; its handle made of steel

^{6.} Sen : Sina Chhatrapati (Vol. I of Extracts and Documents relating to Marktha History) 19, 151-152.

^{7.} Hombay and Western India by James Douglas, London, 1893. Vol. II, p. 174—Mr. Douglas remarks: "No portealt of him has none down to us in an English work except the one in Orms's history, evidently from an oval on glass by some Deibi painter [Given ante Vol. I. p. 331. The accompanying out is from De Jan Chany and X. Raymond's India (Firmin Didot fr. 1315).

—B] and must probably picked up by Orme or his father (landed an adventurer in Western India. 1700) in their wanderings along the case of Western India in the early part of the light Century. Their proximity to Shivaji's own time, is a partial guarantee of its faithfulness." Douglas gives a bust of Shivaji on p. 331 of Vol. II from Orms.

In the Trace's in the Mogal Empire (A.D. 1656-1668) by Bernier reprinted in 1881 (London, Constable & Co.) a bust of Shivaji is reproduced on p. 167 from Valentyn's Resolvening in which is published an engraving of this bust from an Indian drawing. Mr. V. S. Bondra has published in 1983 this bust of Shivaji with the following endorsement:—" Copied from the painting secured by Von Valentyn just after the Sural Suck of 1864 A.D." For other platures of Shivaji see Pictorial Shivaji published by Y. N. Kelkar, Poons, 1937.

and provided with cover; its blade broadened at the joint of the blade and the handle; the end of the handle studded with rubbies and diamonds. This sword, Prof. Manikrao states, was preserved at Kolhapur and was an object of worship but the descendants of Shivaji parted with it out of a sense of loyalty to King Edward (p. 151).

I am unable to verify the statements made by Prof. Manikrao regarding the Bhavāni sword in the above article. If the sword is preserved in the Buckingham Palace its identification may not be a difficult matter. But as matters stand the Bhavāni sword has become the object of much historical speculation and patriotic wonder and the people of Maharashtra will be prepared to pay any price for it provided its existence is traced and its identity proved on historical evidence.

There was once a bellef current in Maharashtra that the sword was preserved in the British Museum. The late Mr. V. L. Bhave has tried to dispel this belief by publishing a letter from the authorities of the British Museum stating that no such sword as the Bhavāni sword has been preserved in that Museum. This belief runs counter to the statement of Prof. Manikrao that the Bhavāni sword is preserved at the Buckingham Palace.

Mr. Parasnis 8 in his article on the Afzalkhan incident quotes the following passage from Justice M. G. Ranade's Rise of the Maratha Power (pp. 97-99):—

"The Mahomedan historians, whom Grant Duff follows, charge Shivaji with treachery in the first attack he made with the fatal vagh-nakh (tiger claws) and the Bhavani sword, etc."

8. Hibban Samgraka (Dec. 1914-Jan. 1915) Vel. VI. Nos. 4 to 6 U. Ep. 303 —No. 19 (p. 63)—In the description of the combat as given by Parasnis on the authority of a hibban discovered by him at Satara the only offensive weapons on Shiraji's person when he set out for the combat are (1) which and (3) Bichoù (p. 69). In this acticle Parasnis has published a photograph of Afraikhan's temb at Pratapgad (facing p. 73). There is also an article in this lesses of the Hibban Samgraka on the family diety of Shivaji containing a photograph of the image of the goddess (facing p. 74) and another photograph of the temple of the goddess (facing p. 76).

James Douglas gives a ricture of which make in Vol. II of his Bombay and Western Iredia (p. 181). His chapters on Shivaji's Forts in this volume (pp. 187-197) will be found interacting. They contain some good illustrations such as (1) Ganga Sagar Tank at Bayagarh (p. 197); (2) Bajarh (p. 66); (3) Pratappark and Afrakkhan's tomb (p. 167); (4) Shivaji on horseback (p. 174); (5) Plan and elevation of Shivaji's Cenetaph (p. 180).

Jayarama Kavi's description of Shivaji's visit to the temple of Bhavani at Pratapgad and of the image of the goddess will be found in the Parphiaparvalagrahapakhyana, chapt. IV, verses 21-24. The temple was througed with people gathered for the muhapuja

" बंटास्ट्रंगकाहाळतुंदुभिष्यतिनादितस् । कालोचितमहापूजासंख्यावृत्तजनेवृंतम् ॥ २६ ॥ " The above remarks give rise to an impression that the works of the Mahomedan historians contain a reference to the Bhavāni sword. I am unable to verify the above statement at present. In the present paper I am confining myself to the reference to the Bhavānī sword in the Maratha records with a view to pointing out the earliest reference to this sword in the contemporary records.

Prof. B. P. Patwardhan in his article on the Afzalkhan incident are remarks that the chief sources for the Afzalkhan incident are Sivabhārata, Jedhe Śakāvali, Ponādā, Sabhāsadi bakhar and 91 Kalami Bakhar and then states 10 that no reference to the use of vāgh-nakh occurs in Śivabhārata11, Jedhe Śakāvali12 and 91 Kalami bakhar 13. The Śivabhārata refers to "guingai"14 while the 91 Kalami bakhar refers to only bichvā and paṭṭā. The Jedhe Śakāvali does not refer to any weapon at all. Later Prof. Patwardhan describing how Shivaji got ready to meet Afzalkhan states (p. 176) "He held the Bhavāni sword in the right hand and the bichvā in the left and tied the shield to his back" (" उत्तव हातांव अवारी वरवार व हावें हातांव

^{9.} Siva-Caritra-Nibandhivali (pub. by B.I.S. Mandal, Poona, Sales 1851-A.D. 1929) Chapter VII, pp. 161-179.

^{10.} Ibid, p. 164.

^{11.} Edited by S. M. Divekar (B.LS. Mandal, Poona, 1927) with numerous illustrations. The text is based on MS No. B. 1499. (Burnell's MSS catalogue), in the Sarasvati Mahai MSS Library of Tanjora. The editor has also availed himself of a palmleaf MS of the Sicubhārata which is a Tamil rendering of the original (vide Upoddhāta, p. 5). The published text of the Sicubhārata contains 9259 Šlokas or verses.

¹² An English rendering of this chronology appears in Shivaji Souvenie (1927) pp. 1 to 45—by Sir Jadumath Sarkar. Pages 47-29 contain an English rendering of the Jedhe Koroma by Sir J. Sarkar. The original texts of the Jedhe Sakheali and the J. Earsemo in Marathi were published by Lokamanya B. G. Tillak in Sive Carita-Fradips (pp. 14-65) ed. by D. V. APTE and S. M. DIVEKAR (B. L. S. Mandal, Poons, 1925). These texts are based on a MS in the possession of Dayajirao Sarjerao Jedhe Deshmukh of the village Kari in Bhor Sats. This MS is on Portuguese paper (22 folios). RAJAWADE published fragments of this Sakheali in his Sources of Maratha History (Khanda XVIII. No. 5).

^{19.} Edited by V. S. VAKASKAR, 1980.

^{14.} Amarakola Kāṇḍa II, verse 89 mentions the word छूपाण = award ("सङ्के तु निकिश्चन्द्र-हासासिरिष्टयः । कीक्षेत्रको मण्डलाग्नः करवालः छुपाणवत् ॥ ८९ ॥") (see B.S.S. edition of Amarakola, 1907, p. 202). For the text of this work the editor has used a MS copied in A.D. 1297 (Vide his Sucana at the commencement). Mr. APTE in his dictionary explains छुपाणकः = a sword while he explains छुपाणिक as a haife or a dagger. The lexicon Abhidhāna Cintamaņi of Homacandra records the word : छुपाणिका (३ मुगेक्श्चर)—" असी असी असी असी असी

In the Parnalaparvatagrahanākhyāns (or the story in verse of the capture of the Panhaia fort near Kolhapur) composed by Jayarama Kavi in Saka 1595 (preface p. 1) = A.D. 1673 the following verse shows that the vaghankha was used by Shivaji's soldiers as a matter of routine :— (chapter III, verse 25 of the Bh. I. S. Mandal Edn., 1935, Poona)

[&]quot; शार्बुलनसम्बोहनिर्मितनस्वरेषुतान् "

विकास पार्टीका दास बांचली "), I am not aware if Prof. Patwardhan identifies the " हुपाणिका " referred to in the Śivabhārata with the Bhavāni sword. Possibly the term हुपाणिका may refer to the bichvā more than to the Bhavāni sword. This reference is, however, inconclusive so far as my present inquiry is concerned because we don't get in the Śivabhārata any mention of the name अवादी as applied to Shivaji's sword.

In the Śwakāvya 15 composed by Purusottama in Sanskrit the meeting of Shivaji and Afzalkhan is described at some length. This poem was composed in a.D. 1821 and hence, though its historical value may not be very great it has some merits as a poem. It describes the fatal embrace of Afzalkhan as follows:-

" आर्किंगमक्षण इभं सृगरादिवेनं धुरवा नृपस्य सक्षिरः प्रविधाय बाह्योः । तस्थी नृपोपि बळवान् नसत्तोस्य कुक्षी दाक्ता (रुवा) विभेद विभिन्नो स्वनौ पपात ॥ ५९ ॥ " 16

The MS from which the above verse is quoted contains illustrations in colour of the Afzalkhan incident. One of these illustrations represents Shivaji 17 dressed for the combat or rather his meeting with Afzalkhan. He holds on his right hand the vägh-nakha and a small dagger in the left hand,

^{18.} Published in the Käepelihäm Sampraha (1884, 1887, by K. N. SANE and J. B. MODAK). This Käepe is almost an epic of the Maratha History (from A.D. 1697 to 1818) Purusuttama's surname was Bands et and his family was resident of Pelgaun in Ahmaduagae District. Purusuttama was born in A.D. 1766 and died as a sanyasi in AD 1866.

^{16.} I have copied this warse from a MS of the work in the Govt, MSS Library at the R. O. R. Institute, Poons,—No. 81 of 1907-15. Purusottama composed a commentary on his pour in which he explains the above verse as follows:—

[&]quot;आलिंगन इति ॥ वः यत्रनः मृगराट् विहः इभिनय आलिंगनस्य क्षणे समये एनं राजानं भृत्वा दृपस्य शिरः बाहोः मध्ये प्रविधाय इदं भृत्वा तस्यौ ॥ बलवान् तृपोपि अस्य यवनस्य कुश्चो कुष्टिपदेशौ नावेनित नावतः वावेविभिक्तिकस्तिवः व्याप्रनावेनेत्ययेः शस्त्या (क्र्या) च विभेद चिच्छेद हि यस्मात् भेदनात् विगता शिला यस्मात् वविशिषाः यवनोपि अवनौ प्रपात् पवितवान् ॥ ५९ ॥ "

^{17.} Vide folio to a of B. O. R. Institute MS No. 81 of 1907-15. The verse describing the person of Shivaji reads as follows:—

[&]quot; नात्युको नातिनीचः कमलदलनिभाक्षोतिपीनोन्नतांसी गौरांगो गृढवत्रुमंनसि च जनयन्योपितां कामदेवः । निभाकः सिंहपानोऽस्णकरनग्णः कंठभूपाधिभूषो सृदंष्यानदरकाजिनविहितपदत्राणकोसी प्रतस्य ॥ ५२ ॥ "

This verse of course does not mention the waghankh and the dagger shown in the picture (2) inches x 11 inch in size) referred to as squared and specific in verse 50 on folio 44 s.

which is obviously the biches referred to in the several accounts of this incident and mentioned as will by our poet. The following three verses tell us how Shivaji meditated on his family deity Durga and obtained her favour before starting on his perilous task:-

'' आहं स्वदीयोस्ति सराज्यकोक्षः काळो बळीयान् कृटिको समावस्। श्रमुर्महान् भीसवलोहसस्यो दुर्गैव देवी शरणं न चान्यः ॥ ४८ ॥ तस्याः प्रसादादहमेवश्रव निहन्मि चिंता न हि काचिद्त्र । तद्वाहिनी स्वं शमयासु चीर बीरैभेटैः पातितवीरसंबैः ॥ ४९ ॥ हस्यं स सेनाधिपति प्रवोध्य हस्तानुकै व्योधनसं निवध्य । वामे करे सुहमतरां च शसी निधाय देवी प्रणमन् प्रवातः ॥ ५०॥ "

The poet explains the word बासी as follows in his commentary:'' बासी दृश्कि स्थान्छमी चासि पुत्री च दृश्कि चारि घेनुके स्थानः !! ''

It appears to me that the " वृह्मवरा मजी" mentioned by Purusottama is same as the ह्यांबल of the Śivābhārata. It is, however, difficult to identify ह्यांबिका with the Bhavāni sword.

James Douglas 18 in his chapter on Shivaji in his Bombay and Western India published in 1893 makes a reference to the Bhavani sword and states in a footnote 19:—"The Genoa blade presented to the Prince of Wales in 1875 during his visit to India by the Raja of Kolhapur" and reproduces a picture of the sword from Grant Durr's History (p. 346). This picture gives us a long blade of sword with a decorated handle with the scabbard pictured near it. The blade of the sword as represented in this picture is curved at the end but the breadth of the blade is almost uniform and not broadened as in the case of the sword claimed to be Shivaji's sword by Mr. Bomonjee D. Pudumai 20 of Poona, who has publi-

^{18.} Bombay and Western India, Vol. I, pp. 851-846, first with Shivaji, his country, his birth, his person and character, his accomplishments, his motto, his good and bad trails, etc. These pages contain the following illustrations:—

⁽I) Picture of Shivaji / bust) from Orms 's Fragments (p. 231).

⁽²⁾ View of Sinhgach (from a photograph by Dr. T. Chooke) (p. 832).
(5) Shivaji's sword "Bhanani" (from Grant Durr'S history) (p. 316.).

^{19,} Ibid, p. 843 — This footnote explains the statement of Prof. MANIERAO of Baroda referred to earlier in this paper to the effect that the Maharaja of Kolhapur presented the sword to King Edward. The Prince of Wales referred to by James Doughas is of course identical with King Edward VII. Students interested in the history and identification of the Bhavant sword may hunt up this clue from official sources.

^{20.} Mr. Punuant in his pamphlet (August, 1978) gives us a picture of a sward in his possession which he claims as Shivaji's award. He also observes (p. 2 of pamphlet)" At any rate one thing is certain that the sword called Bhowant' has not yet been irrefutably identified. There is a belief in Satara that a sight of the sword causes safe delivery of a woman in labour." He refers to the information published by Mr. P. M. CHANDORKAR in the Journal of the

shed a small pamphlet called "Notes of the subject of Shivaji's award." This sword is a "tegh" sword with a broad curved blade, slightly concave in the middle and made of flexible steel. It is single-edged and higher up double-edged upto a length of 9 inches from its point. The length of the blade measured along the middle of its curve from the point to the hilt is 2 ft. $4\frac{1}{2}$ inches. The tang of the sword is $2\frac{1}{2}$ inches wide. The blade is broader higher up, the maximum width being nearly 3 inches. The hilt of the sword is beautifully encased with tiny gold flowers 2^{1} . On the other side of the blade are marks of the crescent moon 2^{2} (6 small marks of the crescent moon, 4 small

Bharat Ribasa Mandal, Poons, 1918 A. D., to the affect that on either side of the throne of Shivaji at Satara there are two awords. One of them is an ordinary sword. The other is the Bhavana sword on the right hand side of the throne. There is an engraving on the blade of this sword vis. "THERE USE SUPPLY THE TOTAL THE STATE STATE THE STATE OF THE STATE

31. In a letter dated 17th February, 1912, from Mr. D. P. MOOS to Khan Bahadur B. D. PUDDELL, the writer considers the sword in question to be a gravine old award of Shivaji. This opinion is based on the following points :-- (1) the quality of the steel (2) its "Tern " shape, a characteristic of the Maratha swords (&) its old-type lattering and (4) the "Tahanshah "work of inlaying the letters, the art of which is now extinct. (Mr. MOOS represented the firm of "The Indian and Griental Armour", Medow Street, Port, Bombay). Mr PUDUMIT emotes an extract from the illustrated Hand-book on Indian Arms (by Wilhraham Econgress now Lord, El.) which refers to a sword presented by the King of Kabul to the Governor-General. This sword once belonged to Tamuriane. Swords are estimated by their aga, watering or temper. PUDUMI reproduces a coloured view of " Jevaheer Khana " once the residence und strong-hold of Shivaji (Fort Singhur, Dt, Poens) and now in his possession. He also gives an extract from Salara Gazetteer (1884) by Sir James CAMPBELL which rouds ;- (p. 238)-"the sword of Afraikhan and Shivaji's favourite sword Bhavant passed to the Mogule on the capture of Shambhall in 1650. They were restored by Aurangusb to Shahu in 1707 and still 1827 remained a valued trophy in the armoury of Shivaji's decendants. " In the ravised edition of his pamphiet, Mr. PUDUMSI (1929) gives a photograph of a brass tray (p. 26) about 2 ft. in diameter with him on which is sunbound the celebrated spisods in Shivaji's life via. the release of a beautiful Moghul lady (daughter-in-law of the Substar of Kalyan) brought as a captive after the eack of Kalyan in 1604 A. D.

22. Mr. PUDUMJI in a revised edition of his pamphlet (21st March, 1939,) on p. 11 draws our attention to the last para 31 of Shivaji's letter to Jayainha, who invaded the Decean at the head of the Moghul army. This para reads as follows: "Tomorrow, the moment the sun shall conceal his face behind the evening cloud, the Crescest move of my sword shall flash forth. That is all, God be with thee, " Mr. PUDUMJI is of opinion that the expression "Crescest move of my sword" in the above para represents Shivaji's own description of his sword " as to its shape, i.e., it had a curved blade. The latter of Shivaji from which the above para has been quoted is in Persian and has been published by the Nagart Pracharini Sabha of Benarce in their Patrika

marks of the full moon possibly and 2 big marks of the crescent moon). Mr. Bomanji Pudumii prints on p. 3 of his pamphlet a copy of a letter dated 24th March, 1925, from the authorities of the British Museum stating that the British Museum does not possess the original "Tigerclaw" or sword of Shivaji, 23

The Sabhāsad Bakhar 25 composed in a. D. 1694 refers in many places to the tutelary deity of Shivaji viz. Sri Bhavāni 25 but no references to the Bhavāni sword can be found in it. The references to the family deity Bhavāni in this bakhar are generally associated with the major incidents of Shivaji's intrepid career but I have failed to trace in this source any mention of Bhavāni as the name of Shivaji's sword. I await more light on this problem from scholars who have done intensive researach in the history of the period.

⁽Bhkga 5, No. 1—Sarrest 1975). This has been reprinted in the Shivaji Sourcesie (1927)—Morathi Section (pp. 161-170) and English trans. of it in the English Section (pp. 170-178). Though this letter in the form of a poem may have a high poetic value its testimony on the question of the shape of Shivaji's sword has no value, especially as the document bears no date and is also of anonymous authorship. Hari Kavi (A. D 1685) describes the Bhavani Sword by the terms " 可是明明: "新聞報酬, 知俗歌和, in his Sambhurāja Carita.

^{93.} This reply was received by Mr. V. L. BHAVE, nutber of the History of the Marathi. Literature (Maharapara Samerat) and is printed in the Journal of the Bharata Ribana Sameratandah Manulai, Poons, of Saka 1887 (= A. D. 1915) p. 19, 18 is signed by C. HERCULES, Record-larger of the Department of British and Mediaeval Antiquities and Ethnology, British Mussum, London, W. C.)

PA. Life of Sica Chhairspais (by Krishnsji Anant Sabhasad) Ed. by K. N. SANE, 1928 (Fourth Edition). Mr. SANE has based his text on five MSS. (1) MS procured from the pujari at Pratappad. (2) MS copied in A. D. 1852 and deposited in the Native General Library of Poons. (8) and (4) MSS procured by Krishnsjipant Acharya Ealgaunkar of Satara. Mr. SANE has relied on the Pratappad copy as it is very old and especially on account of its being found at Pratappad. The date of composition recorded in this MS is Sake 1816 (= A.D. 1897); (5) MS Procured at Mahad, in which some changes appear to have been made from DUFF'S History.

^{25.} Ibid p. 9 (" श्री मवानी दुळदेवता महत्त्रजांची "); pp. 11 and 28 (" श्री मवानी तुळवापूरची"); p. 21 (" श्री मवानी "), p. 42 (श्री शंभूस व मवानीस नमस्वार केला); p. 46 (श्री शंभूसहादेव, " श्री मवानी "), p. 49 (" श्री मवानी "), p. 53) (" श्री मवानी "), p. 63 (" श्री महादेव व श्री मवानी कुळस्वामी "), p. 89 (" श्री मवानी ") (et. Jedhe Salabadh under Saha 1681) — " कदाश्रित श्री शंभेच्या वरदें अफ्डालस्वान मृत्य पावला तरी इशास्तीचे आवाज वाहावरी होतील " (and under Saha 1600) मवानीवाई लेक संमाजी रावे यांसी वाली (at Sringarpur).

The next important contemporary source of information on the problem of the Bhavāni sword is the Śivabhārata 25a composed by Kavīndra Paramānanda by order of Śrī Chhatrapati Shivaji Maharaja. This poet hailed from Nidhinivāsa (= Nevase on the bank of Pravarā river) and was a contemporary of the celebrated Gāgābhaṭṭa who officiated at the coronation of Shivaji in a. p. 1674. He composed the Sivabhārata after Śaka 1583 (= a. p. 1661) and before Śaka 1596 (= a. p. 1674), the year of Shivaji's coronation at Raigad.26 Mr. p. V. Apre 27 has already pointed that Shivaji made use of the sword in his fight with Afzalkhan and this sword is none other than the Bhavānī sword referred to by Paramānanda in the Śivabhārata in verses 16 and 22 of Chapter XX. These verses are as follows as translated by me in English:—

"Prostrate him (Afzalkhan) to the ground by the great stroke of your sword (अति) as that person (demon in the form of yavana) is constantly rising on this earth for the obstruction of dharma" (verse 16).28

25a, Edited by S. M. DIVEKAR, Pub. by the Bharata Hibasa Mandal, Poons, Saka 1810 (= A. D. 1927,) contains a fine frontispiece of a picture of Shivaji in colour from a painting in the Prince of water Museum, Bombay. It is a fascimile reproduction from the original in which the height of Shivaji's figure is about 3f inches. Other good features of the edition are Upoddhāta pp. 1-28 by S. M. DIVEKAR; (2) a useful bibliography; and (3) a musterly introduction by D. V. APTE (pp. 1 to 300.). The text and the Marathi translation of the 51 chapters of this epin, (" चरितं शिवराजस्य भरतस्येव भारतम् "- Chapt I, 22) of the Life of of Shivaji has been critically edited. This is followed by an exhaustive index of planes and persons mentioned in the text. The Illustrations besides the frontispiace are (1) a contemporary horoscope of Shivaji by Sivarama Jyotisi (page 56); (2) photo of folio 39 of MS recording verses about the birth-date of Shivaji (p. 56.); (3) photo of the extract from Jedhe Sakacali containing the birthdate of Shivaji (p. 56); (4) Bangalom Fort (p. 64); 5 Images of the Goddens Bhavani at Fort Sivaneri (Siwai) and at Fort Pratapgad (Bhavani) (p. 65);. (6) Map illustrating the Muslim dominions in Shahaji's time (p. 80); (7) Map of Karnatak in Shahaji's time (p. 80); (8) Map of Southern India in Shahaji's time (p. 80); (0) Map illustrating Shivaji's invasion of Konkon in Saka 1583 (= A.D. 1661) (p. 91); (10) Photos, of the forts, Purandhar, Rajagad and Simahgad (p. 208); (11) Photos of Pratapgad. Panhalgad and of a ploture of Afzalkhan (p. 200 ; (12) Map illustrating Shivaji's invasion of Saka 1589 (= A.D. 1667) after the Afnalkhan incident (p. 248); (13) Map illustrating Shivaji's battle of Umburkhind (p. 248); (14) Map illustrating Shaists Khana's invasion of Saka 1882 (= A. D. 1560); (15) Map illustrating the slege of Panhalgad Saka 1582 (= A. D. 1990) (p. 249) : (16) Pictures of Shah Jahan, Mahmmad Adil Shah, Shalata Khan, Jasarant Sinha, Aurangmb, Faralkhan, Baja Jayasinha and Dilerkhan (pp. 252-258,)

20. These Chronological limits are given by Mr. DIVEKAB (vide p. 20 of his Upod-

dhata to the Sivabharata). The poom refers to the death of Siddi Johar (A.D. 1861).

27. Sienbhärafa (Prastavana, p. 168). In the Index (p. 12 under Bhavani Tarvar misrance is made to verses 22 and 28 of Chap. XX of the text.

28. Page 103 Sivabhhrata-

" उद्भवन्तं निरोधाय धर्मस्येह मुहुर्मेहुः । वर्मनमसिपातेन महता सुवि पात्य ॥ १६ ॥ " "It has been ordained by the Creator that he (Afzaikhan) should be killed by this hand of yours and hence, O King, I (goddess Tulajā) have identified myself with your sword (इत्राणी)" — (verse 22) **9

"With these words Sarvāṇi, i. e. the goddess Bhavāni or Tuljā entered his sword (इपाणिम्) and he (Shivāji) though in a waking state regarded it (the whole occurrence) as a dream. "— (verse 23), 50

In the above verse we get a genesis of the Bhavani sword which is perhaps the earliest on record from contemporary sources : Evidently the goddess Bhavani enters the usual sword of Shivaji and makes it unusual. This association of the goddess Bhavani with Shivan's sword given in a contemporary record (between 1661 and 1674 A. D.) is extremely valuable as it explains how the term Bhavani tarvar came into being. The verses quoted above do not, however, refer to any sword of Shivaji as Bhavani tarvar, an expression which became an established usage during the course of centuries that have elapsed since the tragedy of Afzalkhan. The human sword of Shijvaji having once become divine by its association with the goddess Bhavani and thus having been linked up in popular imagination with all the heroic exploits of Shivaji, whom the people believed to be an incarnation of Siva, this human sword has now become an object of much wonder and speculation for the historian and the patriot alike. It would be certainly a red-letter day on which its existence and identification are proved beyond challenge by any scholar or institution interested in historical research. Our duty for the time being is to collect all possible information which might help scholars and patriots in keeping the memory of the Bhavani sword fresh in their minds so that this quest of the holy grail may continue unabated by all lovers of the Maratha history in particular and of history in general.

The foregoing discussion and record of references to the Bhavani sword appears to me like Shakespeare's drama Hamlet without the King of Denmark. The account of this sword as recorded in the Stradig-

^{29.} Ibid-

[&]quot; विधिना विहितोस्यस्य मृत्युरूवःयाणिनामुना । अतस्तिक्षमि भूत्वाहं कृपाणी भूमणे तव ॥ २२ ॥ "

^{30.} Thid, p. 194-

[&]quot; व्याहरन्तीति धर्वाणी तन्त्रपाणीमबीवधत् । असौ जामदबस्योऽपि तन्त्वप्रमुवमन्यतः॥ २३ ॥ "

vijaya being a late one \$1 cannot be taken as historical truth especially in the absence of contemporary evidence to support it in material particulars. The account of the Sivabharata is quite valuable so far as the genesis of the expression Bhavani tarvar is concerned. The reference to this sword in the Chimis bakhar of a.D. 1811 is also not very helpful. It is, therefore, necessary to search for more contemporary references to the Bhavani sword like that of the Sivabharata, Such references alone can give that factual touch to the history of this question which is necessary to fill up the historical void that separates us from the time of the author of the Sivabharata. I shall, therefore, conclude this paper by putting on record at least one contemporary reference to the Bhavani sword in which we find a poetic description of the exploits of the Bhavani sword in the hands of King Sambhāji, to whom this sword must have passed on as a heroic legacy after Shivaji's death in a.D. 1680. This reference is also very important as it is the only one so far discovered in which the name " Bhavanl's Sword " is mentioned five years after the death of Shivaji, i.e in a.D. 1685 and in which no less than 3 verses or 12 lines are devoted to the praise of this sword. The bearing of these verses on the history of the Bhavani sword was not quite apparent to me when I noticed them first three years ago in my paper, 32 on " Hari Kavi alias Bhanubhatta, a Court-poet of King Sambhaji and his Works, " I was then under the impression that in the documents of the period many authentic references to the Bhavani sword must have been traced and scientifically recorded by the indefatigable researchers 38 in the field. When, however, I began to look for them in the

S1. Vide five Corstra-Prestiga (R. L. S. Mandal, Poons 1925) p. 75 where the date of composition of the Sicadiget/aga is given as Saka 1740 = A.D. 1818. The extracts from several Bakhara relating to the birth date of Shivaji (pp. 71-78) will be found interesting. These bakhars are (1) Sabhācad B. (A.D. 1697), (2) Chitragupts B. (about A.D. 1759), (3) 98 Ealami B. (A.D. 1780), (4) Bakhar composed for Sacai Madhavarao Peshwa (Bajawade Ehanda 4) (A.D. 1783), (5) Chitris B. (A.D. 1810), (6) Chott B. (A.D. 1817), (7) Sicadiget/Jopa (A.D. 1818), (8) Panta Praticidhi B. (A.D. 1844), (9) Panditrao B. (A.D. 1848), (10) Shri Shivaji Pratap (A.D. 1829), (11) Shedgannibar B. (A.D. 1854).

^{22.} This paper was submitted to the Modern History Congress. Poons in June, 1985 and was published in the Annals of the Bhandarker Institute, Vol. XVI, pp. 263-291, Hart Kart was a resident of Surat. His family halled from the Mahārāṣṭra. He composed (1) Sambhurāja Carita by order of Kṛṣṇapaṇḍita, the guru of Sambhaji, (2) Haibayendra-Carita and its commentary Sambhurāja-Carita by order of Sambhaji and an anthology called the Subhāṣitahārāvali. The Sambhurāja-Carita was completed at Surat on 19th January, 1685. It is a mahākāvya in 12 sargus of which only some fragments are available in the Govt. M8S Library at the B. Q. R. Institute, Poons.

^{53.} Rao Bahadur G. S. SARDESAI, the Mahārāṣṭra Historian, has directed my attention in a private communication dated 16th April, 1988 to his views on the problem of Bhavant Sword as recorded by him on p. 58 of his volume on Shivaji (Marathi Riyanni—3, Saka Karra, Shivaji.

published records I was thoroughly disappointed to find a woeful lack of reliable information on the question of the history of the Bhavani sword based on contemporary and subsequent evidence. Evidently the problem has not been examined by any scholar competent to search for, scrutinize and arrange in a chronological order all the available data bearing on the question. I have gathered in this paper a few facts regarding the Bhavani sword solely with a view to provide a historical background to Hari Kavi's description of this sword in his Sambhuraja-Carita, composed in A. D. 1685. This description shows that to a resident of Surat like Hari Kavi the glory of the Bhavani sword had some poetic appeal as will be clear from the following verses :-

Folio 8234 of MS No. 191 of 1875.76 -

" राजर्निक घोषगामस्तव विजयमहो ते वयं मंद वाची वीरश्रीशोभमानः करतलविकतक्षंद्रहासो⁸⁵ भवान्यां(न्याः)। चकेल तप्रमत्तिहरदगछ चछद् भूरि भांकारपूर्णा सा बीराशंसिनीमुख्जिगति विजयाशंसिनी वचकास्ति ॥ १२६ ॥ वांभी स्वरखद्ववही³⁶ छत्तति समुदिता कालकादंविनीव³⁷ ध्वांतार्ली³⁸ सेंन्यधुली बत जगति समातस्य³⁾ झस्कार विशुद् । अखां सारेरपारे 40 प्रधनवसुमर्ती शावयन्ती 12 समन्तात्

Bombay, 1985); -- Shivaji during his Konkan expedition (A. D. 1657-58) came into contact with Lakham Savant of Gos. (1651-1675 A. D.) whom he made a vasml. This Savant had in his possision a famous sword manufactured in Europe, which Shivaji acquired by presenting the Savant 200 hone and a dress of honour. This sword was named Bhovers. As its possession brought much success to Shivaji he used to worship it daily. This sword is still at Satara in the temple of the godden and is included among articles for worship. (Footnote: - King Shahaji (father of Shivaji) sent by sea some valuable articles from Karnstak such as a bedstead, a belt and an armour and a Phirange falcar according to the statement of the Cehoft Bakker of the Maratha Empire. It is possible to conclude that the sword included among the above articles is the Bhavani Sword. The story about the transfer of this sword to London is mot true.).

34. Vide Annals, XVI, p. 268, where these verses have been quoted by me.

85. चंद्रहास = a glittering sword (apte) : " साङ्ग तु निक्तिशचनद्रहासासिरिष्टमः " Amarakofa (11, 6, 50). Bhāmuji Dīkṣita explains :— "चन्द्र इव हासः प्रभा अस्य। चन्द्रं हसति वा। गुतिमत्वात्,"

36. 程度可含 = the sword-creeper = sword resembling a creeper possibly by its length and elasticity.

37. कादंबिनी = a long line of clouds.

88. wild = darkness; Stiel = a row or continuous line.

80. समातल = having over-spread in an intense manner.

40. The unfathomable waters in the form of weapons (used by the army). SR = water.

11. प्रधन = Battle and वसुमती = earth; प्रधनवसुमती = the battle-field.

44. प्रावयन्ती = flooding.

त्रीवकुण्णेभकुंभोद्र⁴⁸तमणिकरकां⁴⁴ न्यक्षिपंती नितांतं ॥ १२७ ॥ सृते नानापदार्थास्तव यदसिकता शंभुराजाद्भुतं तत् तापाकं कीर्तिंचंत्रं विजयहुतसुजं नारकाकी गुणाकी । झस्कारान्वियुदोघानपि रिपुकमकां भारतीमस्मदीयां नारीणां शात्रवीणां नयनसुगसरावाष्यशैवाकिनीख ॥ १२८ ॥ "

In the foregoing three verses Hari Kavi gives us a fine poetic description of the "Bhavāni's Sword" 45 and its doings on the battle-field. This description is inserted in the battle-scene of the Sambhurāja-Carita in which Sambhāji is shown as surrounded by the army of his enemy intending to attack him. With him we find Campā, the terror-struck heroine of the poem on her journey to her husband's home after her marriage 46 with Sambhāji at Surat as also Kṛṣṇapaṇḍita 7 the guru of the Maratha King, who is described as a very important personage throughout the poem and at whose instance, Hari Kavi informs us, he wrote the Sambhurāja-Carita. This description of the Bhavāni's sword has an earlier parallel in the description of the sword of Shabāji 88 by Jayarāma

^{43.} इमकुम = the foreheads of elephants which were full grown (श्रीट). The elephants had their temples shattered to pieces (श्रुण).

^{44.} Higherent = Hall stones in the form of pearls in the temples of elephants (the temples of elephants are supposed to contain pearls). Verms 126 and 127 contain a metaphor of a violent storm attended with lightning and dark clouds and followed by a heavy rain shower with hall stones.

^{45.} The MS has the reading " चन्द्रहासी भवान्यां " The correct reading ought to be चंद्र-हासी भवान्याः = Bhashesi's sword.

^{46.} The Sambharaja-Carita (A. D. 1686) gives a detailed description of Sambhaji's marriage with Campā. In this connection compare a picture of a marriage scene in colours painted on folio 61 of Skandha IX of the Bhagaratapuraga (B. C. R. Institute MS No. 61 of 1907-1915). This MS was prepared in A. D. 1648 at Udayapura. The picture in question shows the bride and bridegroom in matrimonial attire scated facing each other with two priests above scated near the bride and the bridegroom with the nuplial fire between the priests. Another picture on the same folio shows the bride and bridegroom scated on a chariot possibly on a journey to the bridegroom's home. The chariot is dragged by two white horses.

⁴⁷ I shall prove in a separate paper the identity of this Kranapandita with Kavi Kalasha or Kabil, the celebrated minister of king Sambhāji.

^{48.} Vide p. 286 of Bādhāmādhavovilāss champū by Jayarāma Pindye, edited by V. K. RAJAWADE (Šaks 1844 = 1922 A.D.) Poona. This poom is a Life of Shahāji, the father of Shivāji and grandfather of Sambhāji. The description of a sword or अनुवर्णन occurs in the 8th Ullian (verses 227-285) as follows:—

[&]quot; पुनरपरस्मिन् दिवसे यथापूर्वमुपविद्याति सति राजनि शस्त्रमार्जकतैलवावितां रत्नववितम्हि-मंजुलां पार्श्ववर्तिमृत्यपाणियहीतां कृपाणिकामवलोकितुं विकोशां कुर्वाणे सति स कविवेर्णयामास ।

ste, w

Kavi, who composed his Rādhāmādhavavilāsa Champā or a Life of Shahāji between Saka 1575 (= A.D. 1653) and Saka 1580 (A.D. 1658). Evidently Jayarāma Kavi was a senior contemporary of Hari Kavi (A.D. 1685) and his description of Shahāji's sword is not merely poetic but factual as well. It is described as " क्लिन्न्यूडिमंड्रलं" or "lovely on account of its having a handle bedecked with jeweis." It is compared to a cloud (इत्याबाहर) and is called कृष्णा or of darkish lustre due to its being rubbed clean by the application of some polishing oil (अञ्चाबाहर). Will it be possible to prove on documentary evidence that this very sword of Shahāji actually seen and described by Jayarāma Kavi before a.D. 1658 was transferred to Shivāji sometime thereafter and was actually in his possession at Pratapgad at the time of the Afzalkhān incident of a.D.

ययामित मया विभो तव कुपाणिकायाः स्तुति विधाय विनिगच्छते सदिस सत्कवीना पुरः । परिकाणविचक्षणाक्षितितकैकसंरक्षण--वर्ण स्टितस्वयाणभवणमत्र संदीयता ॥ २२७ ॥ राजा सादरं तच्छ्तवान् । यथा ।

हुए तब कुपाणिकेयं इडतरकरपीडनेन संभ्रांता ।

अपहृतकोशा भृत्यैनिंपतित परिष्ठुत्व वैरिणां कंठे ॥ १२८ ॥

हुए तब कुपाणिकायाः प्रायः सारा×नी छापा ।

अनया निकृत्य शत्रृननुकंतित सापि तत्र पत्रस्यान् ॥ २२९ ॥

हस्तोदितो विचित्रः शाहमहीपाल सञ्जमेषस्ते ।

वर्षति यत्र हि धारां कुक्ते तत्रैव जीवजीवनाभावं ॥ २३०॥ आअयं तत्र शाहिक्षतीया हृष्टं कृपाणजल्दस्य । वृष्टि विनेव कुक्ते यस्तृणसृष्टि प्रतीपरदनेषु ॥ २३१ ॥ अवलोक्तिं कृतं या कैरिय चलनं जलस्य जलपुरतः । जृप तव कृपाणनीसद् गण्डांत नीरं परस्य वदनस्यं ॥ २३२ ॥ कृष्णा कार्य कृपाणी राजधाजी विलक्षला अपति । ह्रिति परस्कवकं स्वीयेनाच्छाय कालेन ॥ २३३ ॥ श्रीमान् महाप्रयायः पुष्करकलिता कलिद्वा यस्मिन् । मुमुन्मीलिष् ललिता स्ते चित्रं सरस्वतीं गंगां ॥ २३४ ॥ अलमलमधुना वाहिक्षतीय हृष्टं कृपाणनृतिर्मियः ।

तृणम्प्यरिदंतपृतं विलोक्य निलयाज्ञिःसरति ॥ २३५ ॥ एवमादीन्यन्येषामपि महाक्ष्मीनां खड्गवर्णनान्याकर्णं किमपि विविदिषुरिवान्यत्राकृष्टडप्टिरमवत् ।

^{49.} According to RAJAWADE s vide p. 4 of his Intro. to Radhamadharapilasa.

1659? If this sword of Shahāji is proved to be identical with the sword of his son Shivāji with which the goddess Bhavānī identified herself at the time of the Afzalkhan incident as stated by Kavindra Paramānanda between A. D. 1661-1674 it would be easy for us to imagine that this same sword passed on to Sambhāji⁵⁰ after his father's death in A. D. 1680 and was later described by Hari Kavi in A. D. 1685. Even if this identity of the two swords remains doubtful it would be worth-while representing the results of our discussion about the contemporary references to the swords of Shahājī, Shīvājī and Sambhājī in a tabular form as follows:—

Serial No.	Owner	Source of Description	Date of Description	Description
1	Shahāji	Jayarāma Kavi in VIII Ullāsa of Rādhāmādhava- vilāsa Campū.	Between 1858- 1658 A. D.	" रत्नखचित्रमुष्टि- मेजुळां " and " कृष्णा "
2	Shivaji	Kavindra Para- mananda in Sivabharata, XX, 16, 22, 23.	Bet. A. D. 1661- 1674	कृपाणी or असि
8	Sambhāji	Hair Kavi in Šam- bhurdja – Carita	18th January 1685	चंद्रहासोभवान्याः - असिलता or सङ्ग- वल्ली

The foregoing table shows three different swords associated with the grandfather, the father and the son in one and the same line of kings and described by three different poets, all of whom were contemporaries of their patrons. The difference of about 30 years between the first contemporary reference to a sword and the last reference and the chronological sequence of references tend to suggest a hypothesis for further verification that the objects referred to by three contemporary poets are not several but identical.

The foregoing discussion about the Bhavani sword associated with the hair-raising exploits of Shri Shivaji Maharaja raises the question of

^{60.} Cf. Bar. M. K. SETT'S remarks in his article on "Sri Vatsyayana" in the Jubilee Volume (1938) of the Anthropological Society, Bombay, p. 197—"A young man is asked to go out into the world and carve a career for himself. The carving was done by his trusty sword, often the parting glit of his family."

the existence or otherwise of any earlier historical parallel to the story of the Bhavānī sword as now finds currency in the Mahārāṣṭra and the veracity of which has to a certain extent been confirmed by Hari Kavi's description of the Bhavānī's sword (भवान्या: चंद्रहाम:) in the hands of King Sambhāji. Luckily for us such a historical parallel 51 is found in the divine sword given by a strange woman to Kumāra Kampaṇa, the eldest son of King Bukka of Vijayanagara and which had been the heir-loom in the royal Pāṇḍyan family.

The account of this Pandyan sword has been fortunately preserved for us in a magnificent poem⁵² composed by Kumara Kampana's talented queen Gangadevi and hence possesses much historical value. Kumara Kampana also called Kamparaya was the son of Bukka I (A. D. 1376death, V. Smith Oxf. His. 1923, p. 302) by his wife Depayi. When the prince Kampana grew to manhood his father advised him on the duties of royal princes and asked him to proceed against the king of the Turushkas with his headquarters at Madura. Kampana accordingly undertook this expedition and pitched his camp in the town of Marakats.53 A goddess appeared before him and after describing to him the disastrous consequences of the Mussalman invasions of the South and the sad plight of the southern country and its temples exhorted him to extirpate the invaders and restore the country to its ancient glory, presenting him at the same time with a divine sword. Kamparaya then proceeded against Madura and in a battle, killed the Sultan ruling at the place. He then made grants to several temples.54

The closeness of the above historical parallel to the story of the Bhavani sword is remarkable. Though the Panyan sword mentioned by Gangadevi as presented to her husband Kamparaya is removed historically by about 350 years the points of similarity of the circumstances connected with each sword may now be tabulated as follows:—

^{51. 1} am thankful to my friend Dr. B. A. SALETORE, for pointing out to me this para-

^{52.} Vide Sources of Vijapanagar History by S. K. AIYANGAR, Madras, 1919, pp. 22-24 where Dr. AIYANGAR has given us a brief analysis of each of the eight cantos of Gangadevi's historical poem called 美球双型氧化铁 from a MS in the Govt. Ori. MSS Library, Madras. Vide printed edition of this poem also called মুখ্যবিষ্ণা by Pt. Shrinivas SHASTRI of Travancors, Archaeological Department (Trivandrum).

^{58.} Kamparaya Caritam, Canto V.

^{54.} Ibid., VIII.

The Bhavani Sword The Pandyan Sword (1) This sword is also given by (1) This sword is given by a godthe goddess Bhavani to the dess to the hero. hero. (2) The hero here is Shivaji, son (2) The hero here is Kumara Kamof Shahaji. pana or Kamparaya, son of Bukka L (3) This sword is also supposed (8) This sword is given to the to be given on the eve of hero on the eve of the perfor-Shivaji's meeting with and mance of a heroic deed viz. destruction of Afzalkhan. the destruction of the Sultan of Madura by Kamparaya. (4) The object of Shivaji's ex-(4) The object of the exploit of the ploit was also to deliver the hero was to deliver the Hindus Hindus of the Maharashtra from the tyranny of the Mufrom the Moghul and Muhammadans, not to say their hammadan tyranny indicareligious oppression and deseted by the breaking of Hincration of Hindu temples. du idols and destruction of Hindu temples. (5) Shivaji kills Afzalkhan and (5) Kamparaya, the hero kills the effectively checks the Mu-Sultan of Madura and becomes hammadan tyranny. victorious. (6) Kamparaya makes grants to (6) Shivāji also made some grants to some men of his court several temples after the con-

quest of Madura.

according to the Sivadiqui-

jaya,55

^{55.} Ed. by P. R. NANDURBARKAR and L. E. DANDEKAR, paroda, 1895, p. 171— "Pantajipant was the recipient of the infer of the village Hivarest. He was also given the robes of honour. Visvāsrao Nānāji and others who had served (at the time of the Afraikhān incident) were also the recipients of some inferts, etc. A new tower was built at the place where Afraikhān was killed, etc. "

I believe the above parallelism between the incidents associated with the Pāṇḍyan sword and those connected with the Bhavānī sword will be found sufficiently interesting by the students of the Maratha history.

In concluding my survey of the problem of the Bhavani sword I have to point out that so far no contemporary reference to this sword has yet been traced by scholars working in the field of the Maratha history. In view of this fact vouched by close students of the Maratha history Hari Kavi's reference to the Bhavani sword in a. p. 1685 must be treated as "practically contemporary" 56 and hence should retain its evidential value in any discussion about the genesis and historicity of the Bhavani sword. In view of the decaying condition of the MS in which Hari Kavi's verses about the Bhavani sword are found I have thought it advisable to publish along with this paper photograph of the folio of the MS on which these verses are recorded as also that of the last folio on which the date of composition of the Sambhurāja-Carita is found. 57

^{55.} This paper was read before the Bharat Itihāsa Sama. Mandal, Peona in June 1958. Mr. V. S. BENDRE who was then in London, had sent a note on the subject of this paper for the annual gathering of the Mandal where this paper was read. On reading this note I wrote to be BENDRE pointing out that there is no contemporary evidence regarding the Bhavani sword except the three verses of Hari Kavi. Subsequently Mr. BENDRE sent me a copy of his paper on the Bhavani sword which he had contributed to a London Journal and in which he has admitted the force of my evidence as will be seen from the following extract:—"Where is the Bhavani sword of the great Mahratta here Shivāji? Much has been told in the later chronicles about this sword which was a gift to him by his goddens Shri Bhavani. These matratives are not, however, quite unanimous in their description. The only practically contemporary reference is that by Hari Kavi in his Sambhurāja Carita (1685 A.D.)—Folio S2 verses 126-S of this work—photo-copy supplied by my friend Mr. P. K. GODE, "

^{57.} Plates I and II containing the two photographs under reference are not reproduced here.

8. Parijata-dhvaja of the Maratha King Sambhaji

TIE

(mentioned by his Court-poet Hari Kavi in A.D. 1685)

An exhaustive study of Indian banners from the earliest times up to the present day based on contemporary sources is yet a desideratum in spite of the references to banners recorded in literary and other sources. In the present paper I propose to record two verses containing a reference to the banner of the Marāṭhās in the 17th century. These verses read as follows:—

Folio 74 of the Sambhurajacarita1 — Battle scene

" करस्कुरद्वर्गाळप्रवरचंद्रहासप्रमा —

विभासितदिगाळिभि: सुभडकोटिभि: प्रोद्धटः ।

स भूपविशिसामणियुविमरीचिमाळाचिंठः

सुग्रसमकरोदगुरोस्वदनु पारिजातथ्यवः ॥ ६१ ॥ "

* Indian Historical Quarterly, Vol. XVI. pp. 40-47.

1. Vide my paper in the Assals (B.O.R. Institute) Vol. XVI (1985), pp. 269-291. The only MS of the Sambhurkjacarsta so far known is No. 191 of 1875-76 in the Govt. MSS Library, at the B.O.R. Institute, Poons.

In the Sicabharata (composed between J.D. 1661 and 1674) of Kavindra Paramananda there are references to banners which may be noted here:—

Chapter XXIV, 56 - " अप्रतः अध्यक्तीनां प्रताहानां समेततः कान्तिभः सक्छं व्योम तदा कीर्मीरतां द्वी ॥ ५६ ॥ " Chapter XXIV, 68 - " श्रिष्यद्भिः श्रितिमपि बद्धमृष्टिमाना -बोन्सकाः अवन पताकिभिः पताकाः ॥ ६३ ॥ " III, 18 — " स्वै: स्वै: सैन्यै: परिवृता: पुर: प्रोध्कृषितध्वजै: " Chapter VI, 16 - " केतनीन्नमनं चोश्चेक्षारुचामरवीजनम् " Chapter XI, 18 - " तरलाभिः पवाकाभिस्तवितः परितर्जवन् " Chapter XII, 9 - " कम्पयन्त इवाकाशं पताकापटलपडले: " Chapter XII, 79 - " सपताको प्रवज्ञापि " 85 - " पताकिनीपाठ " Chapter 117 - " न पताका न च भ्वतः " XIV, 5 - " प्रताकोर्मिविशाजितम् ": 85 - " प्रताकिनी " Chapter XXII, 60 — " पताकाभिष्यंत्रेरि "; XXIII, 62 — " पताकिनीम् " Chapter XXIV, 24 र "पताहिनीस्"; XXVIII, 13 — " ध्वतिनी वाझवन्त्राणास्" In the above stanza the word not: refers to Kavi Kalasa, the minister of Sambhāji. The word and possibly refers to the Bhavāni sword in the hand of Sambhāji and the expression universal appears to refer to the Bhagavā Zendā, the banner of the Marāthās. The verse describes Sambhāji as surrounded by the army of the enemy. Kavi Kalass, the guru of Sambhāji is represented here as accompanying his royal disciple. Sambhāji, therefore, tried to protect his guru as also the royal banner called here universal by the poet. In this battle scene Sambhāji's wife Campā, the heroine of the Śambhurājacarita is also shown by the poet to be by his side in the royal chariot on their return from Surat, where the marriage of the heroine took place. The poet refers again to the universal in the following verse on folio 79 of the Śambhurājacarita:—

" अये किमिति दीपिते सम कृपाणकाळानळे भटा नतु पर्वगतां समधिगंतुमागम्यते । भवरसुद्यते इसिमैम गवेषयाम्यद्सुतं प्रचंडतरकार्मुकं तमिह पारिजातच्यवस् ॥ १०८ ॥ "

As the expression unfrances represents in the foregoing verses the banner of the Marathas 7 in the 17th century we have to determine

^{2.} Kavi Kalaia is called Krspa Papolita by Hari Kavi in verses 124 and 125 cm follo 92 of the Sambhursjacarda ("यस्यास्ते गुरुक एव सुनिधिः कृष्णो गुणीयांबुधिः"-v. 125 and "ओकृष्णा-संडितात्कस्थिमुचनविषये कोविदक्केशहर्तां"—v. 124).

a. Verses 126, 127, and 128 on folio 82 of the Sambhürajacarida MS describe the Bhavant sword in the hands of king Sambhājī ("बीरश्रीधोममानः करतव्यविक्यच्चंद्रहासे म्यान्य (न्याः) "
—v.126).

^{4.} Cf. folio 74 — " समेत्य सचिवैः समं तदनुमानसं भूपति — देवार गुक्तोदितो निजवरूथिमीसकने "

^{6.} Cf. folio 18 - " चचाल चललोचना समुप्येदय चंपां स्थे "

^{6.} History knews no wife of Sambhāji of the name Compā. Sir Jadunath Sarkar writes to me under date 21st May, 1986.— "I am inclined to think that Campā was the mother of that Madan Singh, an illegitimate son of Shambhāji, who was kept a prisoner in Aurangmb's camp along with Shahu after the fall of Baigad in 1689."

^{7.} Vide p. 161 of Saka-Kariā Shieāji by Rao Bahadur G. S. Sardessi, 1935. Dealing with Symbols of Royalty Sao Bahadur Sardessi observes:— "Shirāji made current certain special symbols of Royalty connected with the royal throne (Suphhamas). Certain royal symbols like Jarspatia, Danka etc. were used in ancient times. These were renewed by Shirāji at the time of his coronation after giving them proper authority of the Sharas. The Bangaca Zandā was formerly used by many warriors. The Marāthā Sardars used this flag generally while proceeding to battle. Jarspajāā was a dignified transformation of this flag. It was Shirāji who first made it a symbol of royalty, though it was later adopted at several places in the Marāthā Empires. The Jarspajāā was not meant to be used at all times in warfare but it was displayed

its exact significance and ascertain if it is identical (or otherwise) with the orange-coloured Bhagava Zenda of the Marathas so popular in the Maharastra.

In the absence of contemporary descriptions of the Maratha banners recorded in monographs we have to make the best of the expression used by Hari Kavi viz. परिजासन्तर,

The Parijata flower proper is white but its stalk is of orange colour, How can we prove, therefore, that the expression questions means the Bhagava Zenda, the orange-coloured banner of the Marathas? I shall, however, record the evidence collected by me in favour of the identity of the Parijata dhvoja with the Bhagava Zenda. This evidence is as follows:—

- (1) Hari Kavi was a Deccani Brahmin resident of Surat as he himself states in his works, fragments of which have been preserved in the Govt. MSS Library at the B.O.R. Institute. He composed the Śambhu-rājacarita by order⁹ of Sambhāji's minister Kavi Kalaśa, whom he calls Kṛṣṇa Paṇḍita. He also composed his Haihayendracarita and its commentary Śambhuvilāsikā by order¹⁰ of Sambhāji himself as stated by him in this work. It is, therefore, reasonable to infer that he knew Sambhāji's banner very closely and consequently his description of it as Pārijāta-dhvaja is based on a direct knowledge of the banner.
- (2) Hari Kavi was a resident of Surat in Gujarat, where the orangecoloured stems of the white Parijata flowers are crushed for dying pieces

on special occasions during processions. The Bhagara Benda was used before Shivāji's time by his father Shahāji. The foregoing genesis of our flags as it has come down to us appears to be acceptable. " (This is the substance of Rao Bahadur Sardessi's remarks in Marāthi about Royal Symbols).

James Douglas on p. 178 of vol. I (1898) of Bombay and Western India writes;— "Shivāji's standard Bhagava Zanda was swallow-tailed and of a deep grange-colour but on a big day like this the Jarspayaka or golden streamer the national sasign of the Marathas no doubt waved from the great arch which still crowns the highest plateau of Raygarh."

^{9.} Vide verse 172 on folio 288 (20) of Sambhurkjacarita:-

[&]quot; यः श्री श्रांभुमहीषतेरिषं गुरोस्तस्यैव कृष्णास्वया विस्थातस्य निदेशतः बरमिदं काव्यं व्यक्षादद्भुतम् ॥ १७२ ॥ "

^{10.} Vide verse 10 of Hathayendracarita and commentary (MS No. 829 of 1875-76):—

प्रोट्बोधनाय ग्रिंगा किल तन्यतेऽस्य । "

of cloth. The method of preparing red or orange colour from the stems of the Pārijāta flower appears to have been current from ancient times. Pārijāta trees grow wild in large numbers on the Deogarh hill situated in Deogarh Baria between Dohad and Godhra in Gujarat. In view of this it would be reasonable to conclude that Hari Kavi meant by his expression "Pārijāta dhvaja" the orange-coloured banner of the Marāṭhās known to us as the Bhagava Zenda.

(3) In this connection it is interesting to note the association of the Pārijāta flower with red colour as recorded in literature as early as the 5th century A. D. In a Jain work, called the Rājaprašatyasātra, 12 which is the 2nd Upānga of the Švetāmbara Jain canon, Sātra 15 mentions "पाल्याय कुमुमे" (पारिवासकुम) among the standards of comparison for red-coloured objects, the other standards being (1) उरस्रक्षर (blood of a ram), (2) समहित्यर (blood of a hare), (3) नरक्षिर (blood of a ram), (4) बराइक्षर (blood of a boar), (5) माहियक्षिर (blood of a buffalo), (6) बालेन्य्रवाय (young Indragopa insects), (7) बालक्ष्यकर (early morning Sun), (8) संख्यावराम (red glow of evening clouds), (9) मुन्नावराम (red colour of the half of the Guñjā seed), (10) अपाक्षम (the red Japā flower), (11) किंग्रक्षम्य (the red Kiṃšuka flower) ste.

In view of the references recorded above and in view of the influence of the classical Sanskrit literature on Hari Kavi's writings, the association of the Bhaquivi Zendā or the banner of the Marāthās with the Pārijāta tree (with all its legendary associations) appears to me to be the happiest one devised by our poet to signify in one and the same expression not

^{11.} I am thankful to Mr. S. P. Shukla, a Vaidya in Poons, for supplying me the following references from botanical works regarding the Parijata:—(1) " The Males N. C. Cleiness, L. Nyclanthus arboriristis Lines—Native women and children collect them and separating the orange-coloured tubes from the white petals, dry them in the sun and preserve them for dying their clothes a beautiful buff or orange-colour "—(Page 190 of The Maleria Medica of the Hindus by Uday Chandra Dutt).

⁽ii) "The flower stalks yield a fine, but floating buff or grange colour. To extract the dyes the dry flowers are boiled in water, one pound of flowers requiring ten gallons of water, which are evaporated till one gallon is left; the cloth is then dipped into the liquor and hung out to dye. Five yards of muslin can thus be dyed with one pound of flowers. Bilk also takes the colour fairly well, "—(Page 147 of the Botanical Volume, Bombay Gasetteer).

Ed. by Prof. N. V. Vaidya, of the Fergusson College, Pooma, 1938, p. 64.—I am thunkful to Prof. Valdya for having directed my attention to this passage.

only the orange colour 18 of the banner but its desire-yielding virtues as the Parijūta tree is called Kalpavrkşa. 14

The references to the Maratha banner viz. the Bhagava Zenda in contemporary sources 15 will throw more light on the subject of this paper viz. the Pārijāta-dhvaja mentioned by Hari Kavi in A. D. 1685. I have not been able to trace any such references though in later sources we find some references of the Jari-patkā. I shall, therefore, record these references in this paper with a request to the scholars of the Maratha history to publish contemporary references to the Bhagava Zenda and the Jari-patka:—

(1) A. D 1776 — In a letter 16 dated Saka 1698 (Pausa Suddha) from Raghunathrao Peshwa to Narasingrao Govind the Jari-patka is referred to twice. Here the Peshwa assures the addressee that the Jari-patka would be presented to him when he has proved his competence

for receiving it.

(2) A. D. 1782 — In Yadi No. 18 (p. 79 of Treaties, Agreements and Sanads 17 1914) there is reference to Jari-patkā lost on the battle-field.

13. The Pārijāda solour is said to be a substitute for Saffron Colour. Sir George Watt (on p. 480 of his Commercial Products of India, London, 1908) gives substitutes for Saffron: "Indian Chief Substitutes are: Carthange and Nyclanthus" (Pārijāta)."

14. Kalidasa refers to it in the Raghusamia (करपटुमाणां पूर्व पारिश्वत: — Vi, 6). It was one of the five trees of Paradise (said to have been produced at the churning of the cosan and some into the possession of Indra from whom it was wrested by Krans and planted in the

garden of his beloved Satyabhāmā.

16. The Bombay Gamtteer (vol. XVIII. pt. ii, pp. 225-9) records the tradition about the Bhagaca Zanda current in the Maharastra:—"He (Shivaji) chose the calchrated Ramdas Svami as his aptritual guide and aspired to a high character for sanctity. He is even said to have offered all his territories to Ramdas Svami. The Svami had no need of lands but asked

Shivaji to use the colour of his clothes in the Bhagane Zenda or Saffron Banner. "

16. Vide p. 66 of Tritigo - Sammelan-Vrito (1916), B. L. S. Mandal, Poona — Papers of the Bondhie family, ed. by B. V. Bhat — " अंगरेजास विकायतचा हुकुम आला म्हणवे मसलत सुर होईल तुम्ही जरिपटक्या विषद्द अर्ज सांगीन पाठिविकात त्यास पंढरपुरपावेतो मुलकाचा बंदोवस्त करोन चाकरी बजाऊन दाखविण क्रित्रीयाचा कीज तुम्हावर आद्यास ताराज करणे म्हणजे तुम्हास खरिपटका सरकारात्न बहालच केला जाईल ", Of Surendranath Sen: Administrative System of the Marathus (1925), p. 689— (Beward for Military Services):— "Aftagiz was conferred by Shivāji on his generals and officers of losses such as early as the seventeenth century. Similary the honour of carrying Jari Patiko, the golden standard conferred on distinguished Maratha generals, was also quite in accord with the Mughal custom."

17. Published by Vad and Pamania. - page 79.

" हत्ती जरीपटके हुजूरचे नेके आहेत ते हुजूर पाठवाने कलम ! छटाईत गेले स्थाना ठिकाण नाही । "

This document is dated ' इसने समामीन मया व अस्फ ' (= 4.D. 1782).

A clause in this agreement provides for the restoration of this Jari-patka but the opposite party is unable to restore it as it was lost on the battle-field and could not be traced.

- (3) c. A.D. 1770 In the Keladinrpavijaya18 of Lingana Kavi the following flags are mentioned:—
 - (i) Yellow flag Symbol of the Patshahas of Bhaganagar.
 - (ii) Do Nizam Patshah.
 - (iii) Red flag -- Barld Patshah (of Bedar).
 - (iv) " उपरण्याचे निशाण "- Hasan Gangû Bommanna Patshah.
- (4) A. D. 1673 Jayarāma Kavi in the Parnālaparvatagrahaṇākhyāna¹⁹ or the story of the capture of the Panhāļā fort near Kolhapur
 describes Shivāji's visit to the temple of the goddess Bhavānī on the
 Pratapgad (Ch. IV, 24). This temple was adorned with flags (प्रवाहासि:
 अस्ट्रेस्स्). This poem describes the visit²⁰ of Shivāji to Rāmdās Svāmi
 but it does not refer to the current tradition about the Bhagavā Zenda viz.
 that Rāmdās Svāmi asked Shivāji to use the colour of his clothes for
 his banner.

Kavindra Paramānanda who composed his Śivabhārata by order of Shivāji between A.D. 1661 and 1674 informs us that at the age of 12 Shivāji was despatched by his father Shahāji to take charge of the province of Poona (X, 23—पुरुषोधिपसेन बाह: विस्मियोजयन्). At this time

^{18.} Šivocaritra-vyttasamgraha, P. B. Desai, B.I.S. Mandal, Poona, 1988 (Kānadī Vibhāga, Khanda I).

Ed. by S. M. Divekar with Markth Translation, B.L.S. Mandal, Poons, 1923, p. 28.
 Ibid., ch. IV, vv. 16-20;—

[&]quot; ततः पीलस्यनगरे परमानन्दनन्दितः ।

रसेस्य प्रश्नदश्मिः कशीन्द्रैवीधितिहिनैः ॥ १६ ॥
गीयमानं यशः स्थीयं श्रुत्वा ।

मन्दिराग्न्यं समासाच एक एवात्रगोऽभवत् ।

गोस्वामिचरणहंदं नन्द्रयामास मन्दिरे ॥ १८ ॥

गोस्वामी च ततस्यस्य हस्तं विन्यस्य मस्तके ।

पूर्णसामान्यदात्रीमिराशीर्मिः पर्यतीपयत् ॥ १९ ॥

ययोचितानि चन्नाणि रत्नानि विविधान्यपि ।

विन्यस्यापे स नूपतिनैमस्कृत्य पुनः पुनः ॥ २० ॥

ययो सेनिकैः सार्ष पौरानानन्दयञ्चनैः ।"

[&]quot;Goavam) " in the above verses refers to Svam) Ramdas.

he was provided with all the paraphernalia21 of his office including tall flags (प्रजी: उपने:), but we have no means of visualising the colour of these flags. 21. Śścabhārata, ch. X. 25-27 : —

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" ततः कतिपैयरेव गाववाविपदातिभाः। मोहेरामेरमात्येश ख्यातेरध्वापकेरपि ॥ २५ ॥ विरुदेश ध्वतेरुवैः कोपणापि च भूयसा । तथा परिजनैरन्परनन्यसमकर्मभिः ॥ २६ ॥ समवेतमम् शाहभपतिश्शोभने दिने । प्राहिणोत्पृष्यदेशाय पृष्यकारिणमात्मजम् ॥ २७ ॥ "

Since this article was sent to the press Mr. S. N. Joshi of the Bharata L S. Mandal, Poons, has published a note on the Management of Rayagadh fort in later Peshwa times (pp. 155-200 of B. I.S.M. Quarterly, XX, No. 8 -- January 1940). In this paper Mr. Joshi gives details of the dead-stock on the fort at the beginning of A.D. 1773 and the expenditure incurred on the unkeep of the guns, the royal throne, the outposts, piquits, guards, buildings, office establishment, patroling, national flag, holiday functions, worship of the deities, the contigents of goldiers etc. during the period 1775-1815 A.D.

The entry about the national flag (misans) is found on p. 189 in a list of A.D. 1813, It shows the expenditure on " Jot " cloth and " Ane gern " and oil for painting the flag. In the Sicaldegu composed in A.D. 1821 by Puru ottama the Bhagaca Zenda is called "Gasrablida puts " or cloth besmeared with red-chalk (Gairika) colour. This Gairika is identical with " Kae geru " colour mentioned above. Purusottams (born A.D. 1756 and died 1856) describes the meeting of Bamadasa and Shivaji and Ramadasa's giving the Bhagasa Zenjil or "gairikhlda pata" to Shivaji :-

> " गैरिकाक्तपटासमें ध्वनं दत्तं प्रयस्य सः । यं यं देशं ययी राजा स स देशो वशोऽभवत् ॥ २३ ॥ "

> > BY BURNES - STATE OF SECOND And in the land of with out will put a land

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(The Sieg-theya is published by K. N. Sane and J. B. Modak in Kneyetihasaramgrana - 1884-87, A MS of this Allegs is in the Bhandarkar Oriental Research Institute - No. 81 of 1907-1915).

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9. The Bhagva Zenda Of The Marathas "

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Between A. D. 1685 and 1813

In my paper 1 on the "Parijātā-dhvaja of the Marāṭha King Sambhāji" I recorded the following references to the Marāṭhā banner:—

- (1) A. D. 1685-Hari Kavi Courtpoet of King Sambhāji, the son
 of Shivāji the Great, refers to
 Sambhāji's banner as " पारिजावभाषा" in two verses of his Sambhurāja-Carita.
- (2) A. D. 1776 Reference to "जरि-पटका" in a letter dated Śaka 1698. The Jaripaţkā was conferred as a mark of honour on the Marāṭhā generals.
- (3) A. D. 1782 Reference to wirver lost on the battle field.

 A clause providing for the restoration of Jaripatka found in an agreement between two parties.
- (4) c. A. D. 1770 References in Keladingpavijaya of Lingana Kavi to the yellow flags of the Patshahas of Bhaganagar and Nizam Shah and red flag of Barid Patshah (of Bedar).

I tried to prove that the unfrances mentioned by Hari Kavi was identical with Bhagava Zenda or the orange-coloured flag of the Marathas as it is known to-day. This suggestion was accepted by many scholars but in the absence of any other early reference to the Maratha banner indicative of its colour I could not effectively clarify the doubts of certain friends as regards the colour of the Maratha banner as used by Sambhaji.

I propose to record, therefore, some further evidence
regarding the Bhagva Zenda of
the Marathas, which clarifies the
meaning of the term " परिचारच्या" used by Hari Kavi in A. D.
1685. This evidence is as
follows:—

A. D. 1789 - In the accounts of Shahu Chhatrapati, the Son of Sambhāji published in the Peshwa Daftar Selec-

[&]quot; Journal of S. M. Library (Tanjors), Vol. III, pp. 1-8

^{1.} Vide Indian Historical Quarterly, XVI (1940), pp. 40-47.

Sardesai, we find some accounts pertaining to the Campaign of Bassein of A. D. 1739. In these accounts the entry for 22nd May 1739 mentions the expense for hoisting the flag of victory after the conquest of Bassein. This expense includes the following items:—

Rs. 27-6-9- Materials for worship etc., 2-5-0-cloth for preparing the flag (Zenda) and dying it by the use of gera and oil as specified below:—

2-0-0 gerû = weight 5 sers. 0-5-0 oil = weight 1 ser. 2-5-0

It appears from the above entries that 10 pieces of Khādi cloth were purchased and dyed in the colour prepared by mixing gerā and oil so that the colour may be fast and deep. As are (Sans. कि.क.) means red chalk

or othre the colour produced by its mixture with oil is the celebrated Bhagava colour, which is used by the Sanyasis for their clothes. Evidently the association of this colour with Sanyasis fater gave currency to the story about the presentation of Bhagavā Zendā by Saint Rāmdās to Shivaji the Great. Whatever be the truth of this story the fact remains that the Maratha flag described as " पारिवात प्यत " in A. D. 1685 is identical with the s would air 'hoisted up as a flag of victory after the memorable Bassein Campaign of A. D. 1789. It is also identical with the " मेरिकाफ vz" supposed to have been given to Shivaji the Great as described later in A. D. 1821 by Purusottama Kavi in his Sivakāvya in the following verse: -

ं गैरिकाक्षपटाच्छकं ध्वतं दत्तं प्रमुख सः । यं यं देशं वयौ राजा स स देशो वशोऽभवत् ॥' ॥ 28॥

In a list 8 of A.D. 1818 we find

22-5-1939- "वसई फते जालियावरी निशाण चढले त्यास सर्च र ॥
२७। ≥॥ छ २५ र ॥ पुजेस सामान वगैरे
२। ८ छ ३७ गो झेंडा कराववासी खाद्या १०
स्वाद्या रंगाई बदल सर्च
२ गेरू वजन पके ४४५
1÷ तेल वजन पके ४४1
२। ∵॥

Peshwa Daftar Selection No. 30 — Miscellaneous Papers of Shahu and his First Two Peshwas 1988, p. 257.

Vide p. 189 of B. L. S. M. Quarterly, Poons, XX (1940) No. 3, atr. S. N. Joshi's note on the management of the Rayagad fort.

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the method of preparing Bhagava Zenda repeated, as in this list the articles used for such preparation are (i) "jot" cloth, (2) "Kāv geru" and (3) oil. It is clear, therefore, that the method of preparing the national flag in the 17th

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and 18th century remained unaltered and continued even in the 19th century. In view of this continuity it may be reasonable to identify the परिवासम्बद्ध of Sambhāji with the भगवा भेडा of Shahu hoisted at Bassein in A. D. 1739.

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AD CONTRACTOR AND VALUE OF STREET

10. The Indian Bullock-Cart : its Pre-Historic and Vedic Ancestors *

Mr. W. L. Murrell, Superintending Engineer, Bihar, in his paper on " Roads in India and Australia-Our difficulties and some suggestions," presented before the last Roads Congress Session makes the following remarks 1 about the Indian Bullock-Cart :-

" Even greater than the difficulty of funds is the intolerable dictatorship of the steel tyre of the Indian Bullock-Cart. This survivor of the Dark Ages in India is chiefly responsible for the complete stagnation of the development of our road technique and it is the steel tyre 2 that (if allowed to persist) will throttle the development of Agriculture, education and whatever goes to make a nation great." Leaving engineers to settle the question of betterment of Indian roads by means of their road technique and the replacement of steel tyres by pneumatic rubber tyres, I shall record here some information about the bullock-cart in India and its antiquity in the light of literary and archaeological evidence.

According to the Encyclopaedia Brittanica 3 which has some remarks about the Primitive Vehicle" the earliest type of vehicle was the sledge, having no wheels and mounted on runners. From the sledge was evolved the rude cart with wheels made of wooden discs used for agricultural and other purposes for many centuries with few modifications. Such carts are still to be seen in Spain. Portugal and Mexico drawn by a pair of yoked oxen." We are further told that the requirements of war 4 and hunting had a marked effect on the general design of the vehicle. About 1500 B. C. we find the Egyptian⁵ two-wheeled chariot in a high state of perfec-

^{*} The Poons Orientalist Vol. V. Nos. 2-3 pp. 114-151.

^{1.} Vide p. VI of New Review (Calcutta) August 1940 where these remarks are quoted.

^{2.} I have not examined the possibility of Ancient Carts or Charlots, possessing steel tyres which now sharecterize the bullock-carts. If the existence of these tyres is proved by archaeolegical and literary evidence Mr. Murrell's criticism about them would be justified. It oppoars to me that the ancient charlot in India, Egypt etc. was entirely at the mercy of bad roads and hence the Vedic post invoked the aid of the Gods Indra and Vanaspate in the Recede, III, 88 (18-20). We must first prove that the steel tyre of the Indian bullock-cart of the present day is really a survivor of the so-called " Dark Ages in India " referred to by Mr. Murrell.

^{3.} Fourteenth Edition (Vol. IV) 1929, Page 928 - article on Carriage. See also article on Cart (p. 935).

^{4.} Compare the Epic war-chariot to which I have referred at the end of this paper.

^{6.} Vide Egyptian Wall Paintings of the Tombs and Palaces of the XVIII and XIX Dynamics (1809-1900 B. C.) by Ambrose Lansing, The Metropolitan Museum of Art,-New York, (Continued on next page)

tion while the chariots of Assyrians, Greeks and Romans were the first carriages known to us.

In the above remarks about the earliest type of vehicle no reference is found to the evolution of the Indian bullock-cart from remote antiquity. Whether the theory of the evolution of the rude cart with wheels of wooden discs from the sledge is applicable to the Indian bullock-cart or not, is also a matter for investigation by experts in the field of ancient Indian history and civilization. In view, however, of the present popular interest in bullocks and their breeding for the betterment of Indian Agriculture it is our duty to collect all possible information about the different types of bulls 1 known to ancient India from literary and archaeological sources. We must also reconstruct from fragmentary data the history of the Indian bullock-cart which had so much to do with Indian Agriculture from the remotest antiquity.

Page 15-The Tomb of Ken-Amin (No. 92) about 1480 B.C.— Nos. 47, 48—New year's Gifts scene "The Chariot is interesting for its inscription "The Chariot of his majesty, 'The Sprine by name'. Its wood was brought from To-sufer in the country of Naharin. "The Chariot was a novelty in Egypt and the Egyptians still made it of wood imported from Asia. A bow, a mase, and a poniard, a coat of scale armor, and alaborately decorated quivers were included among the gifts."

The Tomb of Uner-Het (No. 56) - about 1420 B.C.

^{51.} Hunting from a Chariot. Egypt had not known horses or Chariots until the invasions of Hykses and their early use by Egyptians was naturally in war. Here, however, User-Het has some out hunting in his Chariot and is creating have among the desert animals. The seems is unfinished, as may be seen not only by the emission of details but also by the blank columns where the inscription should be.

The Tomb of Huy (No. 40-about 1855 B. C.-No. 103-" Furniture, shields and a Chariot."

^{1.} Vide p. 48 of Mohes-jo-doro and the Indus Civilization by Six John Marshall, Vol. I. London, 1931—" From the abundant remains of the humped Indian bulls met with in avery stratum of the site (most of them, be it said, of young animals) it is evident that the Indus valley must have been specially rich in this fine based of cattle, which was closely allied to, if not identical with the magnificent white and grey breed still common in Sind, Northern Gujarai and Rajgutana, but wholly different from the small humped cattle of Central India and the Dakkan. To what a pitch these magnificent excatures had been bred at this remote period may be gauged from the life-like engravings of them on scale 379-40 one of which is improduced on the front cover of this volume. — Basides the great humped cattle there was also a smaller short-horned and humpless species which is not infrequently represented among the terra-cotae of this period, both in the India valley and Balucistan but of which no actual bones or horne have yet been identified."

In foot safe 1, Marshall states that the humped built must have been common at this time in Balooi tan and appears to have been known in West Persia and Mesopotamia (Cf. Ch. XVIII, p. 347) but whether the breed in these countries was the same as in filled it is not possible to determine. He rejects Colonel Sewell's suggestion that these humped cattle were posterior to the sheep and buildle as the seals and other objects depicting these animals are found indiscriminately at all levels.

As the Mohenjo-daro Civilization is pre-historic and as it is the oldest known civilization of all civilizations that were nurtured by the Indian peninsula, its evidence regarding the bullock-cart must be treated with some deference in all investigation about the antiquity of the Indian bullock-cart. Fortunately for us the clay-models of toys discovered at Mohenjo-daro include clay-models of carts also along with those of other toys in which birds etc. are represented. The remarks 1 of Sir John Marshall regarding these clay-models of toys and in particular about the toy-carts are as follows: - " Birds might be mounted on wheels and oxen might be yoked to toy carts (Plate CLIII, No. 24). These little toy-carts are particularly interesting as being amongst the earliest representations of wheeled vehicles known to us, approximately contemporary, that is to say, with the Charlot depicted on a stone slab at Ur (about 3200 B. C. according to Mr. Wooley) and the model of a wagon from Anau (See infra Chap. XXVII, pp. 554-5). "

"The toy-carts from Mohenjo-daro are all of terra-cots and for the most part of the type shown by Mr. Mackay on Plate CLIV where they are compared with the modern farm-carts of Sind. There is a specimen however, from Harappa made of copper which seems as if it might rather have resembled the present-day ekka. No doubt many other children's toys were made of less durable materials than terra-cota and have perished in the course of ages. "

The Copper-cart referred to Marshall in the above remarks is des-

cribed # as follows :-" Among other objects found a peculiar interest attaches to a very fragmentary two-wheeled miniature copper-cart (Plate XXIII d). The axle, wheels, and the animal 4 which were originally attached to it are mis-

^{1.} Vide p. 89 of Makenjo-dare etc., Vol. I, 1981.

Z. Cl. a sculptured relief of an Assyrian War-Churiof of about 650 B. C. in the Louvre (p. 55 of Oxford History of the World by Davies, 1987). This Charlot has two wheels (with axio and spokes) and an open box in which we find four men, one of which is the driver holding the reine of the horse yoked to the Charlot. By the able of the driver we find a man abcoting an arrow from the bow in his hand. The remaining two men are shown with shields of a circular type in their hands. On p. 160 we find a photo of an Eurusean Chariot which is bronze work (in the Metropolitan Museum, New York), I his Chariot also has two wheels with anle and spokes, and a long pole with yoke, the two ends of which are surved downwards to fit the nocks of animals to be yoked to it. The Charlot is occupied by two persons. On page 184 a picture of a Roman Charlot rans from a Roman Mossic in Britain is given. Here we find four two-wheeled Chariots in motion, each drawn by two horses. These races were very popular in ancient Boma.

^{3.} Vide p. 100 of the Report of the Arch. Survey of India for 1926-27 - Exploration at Harappa.

^{4.} Was this animal a bullock or a horse ?

sing. The cart is open, front and back, provided with shafts and relieved on the gabled roof and sidewalls with lozenge and cross-shaped patterns. The driver is seated in front on a raised seat."

The foregoing description about the two-wheeled carts represented by a clay-model and a miniature copper-model found at Mohenjo-daro and Harappā respectively eatablish beyond challenge the existence of twowheeled vehicles in these two regions in pre-historic times. Whether these two-wheeled vehicles were evolved from sledges in earlier on Indian soil as suggested by the writer in the Encyclopaedia Britannica with respect to European civilization we cannot say at present.

Let us now record some evidence regarding the two-wheeled vehicle from some literary sources connected with the Aryan Civilization. In the Rgveda, the earliest record of the Aryan race, there are numerous references to bulls, cows, buffaloes as also to cars and chariots. The best reference for our present purpose is furnished by Sūkta 55 of the Third Mandala of the Rgveda. This Sūkta or hymn contains practically a terminology for the different parts of the Chariot and its equipment as follows:—

- (1) The Chariot is called स्वन्दन.
- (2) It was made of the timber of the after tree and the faraut tree.
- (3) It was a means of travel and hence is called win.
- (4) It was drawn by two bulls (নাজী) which are also called by the word অৰ্ভ্যু

Vide Index to the Translation of the Rgveds by Griffith, Vol. L 1896, pp. 10, 18, 100, 261, 215, 144, 281, 287, 375, 619, 644 and Vol. II, (1897) pp. 228, 363, 851, 360, 48

See also Mr. G. T. Date's Art of War on Ancient India (1929.) Chapter V on War Animals and War Vehicles, (pp. 43-51.), Mr. Date describes the Charlot of Vedic Aryans with following particulars:—

(1) Two wheels, (2) a rim (peer), (3) a felly (pradhi), spokes (arā), have (nāthi). The rim and felly constituted the news. The hole in the nave was called Khu into which the sud of the axis was put. Solid wheels were sometimes used. The axis (akis) was made of arāta wood and the body of the chariot (Kofu) was placed above it. There were sends for warriors (canadaura or garta) Ordinarily there was a pole, one end of which passed through the yoke, the other being attached to the axis. The pole and yoke were tied together. The yoke was placed on the necks of horses. Raims or Raims means reins and Kafa denotes a whip. Two horses were commonly used. Sometimes three or more were also employed. A poor man had to be content with one horse which then ran between two poles. The pole was a hundred and eighty eight angals long, the axis a hundred and four and the yoke, eighty six. Besides horses, asses (gardabha) and mules (afeatart) were also used to draw the Chariot. (See Vedic India by Keith and Macdonell, pp. 201 ff.).

Mr. Date states further that the Epic Charlot did not materially differ form the Vedie Car. He then describes the Epic Charlot on p. 47.

(Mr. Date does not refer to the Spandana or Charlot drawn by buils described in Sukia 53 of Mandala III of Rayeda. Perhaps the Horse Charlot was used as a war-velute while the bullock Charlot was used as a war-velute while the

- (5) Its axle is called west.
- (6) Its pole was called gur.
- (7) Its yoke is termed gπ.
- (8) Its fellies are denoted by the word ufa,
- (9) Its yoke-pins are called পাৰহণ which Sayana explains as
 "প্ৰন্থীত প্ৰতিষ্ঠ" because they were liable to slip out.

The Vedic poet, the author of this hymn, invokes god Indra and Vanaspati or the "sovereign of the wood" to keep the Chariot and its parts in good trim so that the traveller may reach his home safely without any mishap on the way. 1

The detailed information about the Chariot recorded above is found in verses or Rks² 17, 18, 19 and 20 of Hymn 53 of Mandala III of the Rgveda and it gives us a vivid idea of the two-wheeled vehicle current in the Vedic age. References to the Chariot in later ³ Sanskrit literature

" सोऽधस्तात् शकरस्य पामानं कवमाणम् etc. "

^{1.} The safety of travellers in the Vedio Chariot was of course greater than that now furnished by our motor lorries and scroplanes and still the men of the Vedio age invoked the gods for their safety in travel. The prayer of modern travellers, if at all they think of safety, is that the driver is not in a drunken state or the pilot has the necessary license for his ability to pilot his passenger-plane safely.

^{2.} I reproduce below the translation of these Rks as given by Griffith (p. 875 of Vol. 1):— "17. Strong be the pair of Ozen, firm the axies, let not the pole slip nor the yoke be broken. May Indra keep the yoke-piess from decaying; attend us thou, whose fellies are un-injured.

^{18.} O Indra, give our bodies strength, strength to the bulls who draw the wains.

Strongth to our seed and progeny that they may live, for thou art he who giveth strength.

^{19.} Enclose thee in the heart of Khayar timber, in the Car wrought of Shapa put firmness.

Show thyself strong, O Axle, fixed and strengthened, throw us not from the Car whereou we travel.

^{20.} Let not this Soyran of the wood leave us forlorn or injure us,

Safe may we be until we reach our homes, and rest us and unyoke."

We can imagine from the above description of a Chariot in motion the mental condition of persons travelling in it. The experience of those Vedic users of this bullock-chariot without springs or spring-cushions must have been practically the same as we get while travelling in a bullock-cart to villages not so much on P. W. D. reads as on Local Board reads. We now invoke the aid of the Engineers at Indrapranta (Delhi) to provide a pattern of the bullock-chariot which would ensure ease and comfort to the Indian villager.

^{2.} The Chandegea Upanizad which was composed before Buddha and Papini (Winternitz : History of Indian Literature I, p. 286) refers to 215Z or Car :--

are too numerous to be recorded in this paper, which is confined to the Indian bullock-cart in its earliest form. In the Buddhist literature as also in the early Jain literature there are plenty of references to the vehicles which are worth studying with a view to see what types of vehicles and their equipment were in vogue in the post-Vedic period upto the beginning of the Christian era.

Mr. G. T. Date I refers to the oldest Indian war-car as represented in the paintings of a Sumerian King who reigned in 1495 B. C. He observes that this chariot closely resembles the two-wheeled car found in the Sanchi bas-reliefs drawn by two horses. On the railing of the Barhut stapa also we find a four-horse Chariot. These are representations of cars drawn by horses and not by bullocks and hence do not enable us to visualise clearly the pattern of the ancient bullock-cart as such which may have been current in those days and used for agricultural purposes.

The use of chariots in the Mahabbarata was very common. These chariots consisted of two wheels only (" द्वावश्विन) हे रथस्यापि नक्षे" — Vanaparvan). Vide page 510 to 224 of महा-भारताचा उपस्कृत by C. V. Vaidys, Poons, 1922, on p. 518. Mr. Vaidys gives description of Bathas (रथवर्गन) some points from which I note below:—

(1) The Epic Chariot was drawn by four horses.

(2) The Charlot as well as the horses were well decorated,

(3) The Chariot had a top (resembling a temple dome) which held a fluttering flag bearing characteristic colour and symbol of each warrior.

(4) The Chariet had a big drum on it. Some Chariots had, two mydanges which produced sound when the Chariot was in motion.

This is a typical war Chariot and it presents a vivid contrast to the Vedic bullock-drawn cart or Chariot referred to in Heredo, I. 63 (18-20).

L. drl of War etc., 1929, p. 40.

2. This King is Thothmes III (1495 B. C.). Vide Plates XVI and XXIX of Combridge History of India, Vol. L

3. This Chariot is said to have been presented by Indian Charioteers to the Sumerian sovereign. It resembles the Sauchi Chariot with two wheels and an open box behind. It has one pole with a yele at the end but the Sauchi Chariot has one long pole in the middle and two short shalls on the sides. The yele is attached to the middle one. I think the Sauchi chariot resembles in point of construction the bullock-carts used in Kenkan and other parts of the Docean.

4. The Barket Car has four horses yoked in one line. Mr. Date states that "Charlots are engraved on the terra-cota plaque from Bhits and the Copper loth from Katn (Indo-dry. p. 339). Like the Sanchi Car they are open on all sides."

5. This study of the Indian bullock-cart and allied rehicles is by no means exhaustive. I have supplied a short summary of it to the Agricultural Engineer to the Government of Bombay in response to an inquiry from him in this matter in August 1940. I frust, however it would be of some use to layness, if not to the experts in the field of ancient Indian Culture and Civilization.

11. Carriage-Manufacture in the Vedic Period And in Ancient China in II21 B, C.*

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In the Vedic Index 1 by Keith and Macdonell we get the following information about the Chariot (ratha) of Vedic Aryans:-

(1) Ratha meant in the Raveda and later a 'chariot' as opposed to anas (cart) though the distinction is not absolute. Of differences in the structure of the two we have no information, except that the Kha (nave hole) in the wheel of the chariot was greater than in that of the cart.

(2) As a rule the chariot had two wheels (cakra).

(3) The wheel consisted of a rim (pavi), a felly (pradhi), spokes (ara) and a nave (nabhya).

(4) The rim and the felly constituted the nemi.

(5) The hole in the nave is called kha.

(6) The end of th axle was inserted into kha.

(7) The term and may denote the extremity of the axle that was inserted in the nave or the lynch-pin used to keep that extremity in the wheel.

(8) Sometimes a solid wheel was used.

(9) The axle (akşa) was in some cases made of (araţu) wood, and round its ends the wheel revolved.

(10) The axle was attached to the body of the chariot (koia,), which was also called Vandhura meaning the "seat" of the chariot.

(11) The chariot of the Asvins is called "tri-vandhura" and "tri-cakra" i. e. a chariot with three seats and three wheels. Zimmer, however, considers such a chariot as purely mythical.

(12) Garta denoted the seat of the warrior.

(13) The pole of the chariot (işā, prauga) was at right angles to the axle. Normally there was one pole on either side of which the horses were harnessed.

(14) A yoke (yuga) was laid across the necks of the horses. The pole was passed through the hole in the yoke (kha or tardman) and the yoke and the pole were tied together.

(15) The horses were tied by the neck (griva) where the yoke was placed and also at the shoulder, presumably by traces fastened to a bar of wood at right angles to the pole, or fastened to the ends of the pole,

^{*} Annals (B. O. R. Institute); Vol. XXVII, pp. 288-802.

¹ See Vol. II, pp. 201-208.

are too numerous to be recorded in this paper, which is confined to the Indian bullock-cart in its earliest form. In the Buddhist literature as also in the early Jain literature there are plenty of references to the vehicles which are worth studying with a view to see what types of vehicles and their equipment were in vogue in the post-Vedic period upto the beginning of the Christian era.

Mr. G. T. Date ¹ refers to the oldest Indian war-car as represented in the paintings of a Sumerian King ² who reigned in 1495 B. C. He observes that this chariot ³ closely resembles the two-wheeled car found in the Sanchi bas-reliefs drawn by two horses. On the railing of the Barhut ⁴ Stūpa also we find a four-horse Chariot. These are representations of cars drawn by horses and not by bullocks and hence do not enable us to visualise clearly the pattern of the ancient bullock-cart as such which may have been current in those days and used for agricultural purposes. ⁵

The use of chariots in the Mahabharata was very common. These abariots consisted of two wheels only (" हावश्विनी हे रथस्त्रापि सके " — Vanaparvan). Vide page 510 to 224 of महा-भारताचा उपसहार by C. V. Valdya, Poona, 1922, on p. 518. Mr. Valdya gives description of Rathas (रथवर्णन) some points from which I note below :--

(1) The Epic Charlet was drawn by four horses.

(2) The Charlot as well as the horses were well deporated,

(5) The Charlot had a top (resembling a temple dome) which held a fluttoring flag bearing characteristic colour and symbol of such warrier.

(4) The Charlot had a big drum on it. Some Charlots had two mydaligus which producod sound when the Charlot was in motion.

This is a typical war Charlot and it presents a vivid contrast to the Vedic bullock-drawn cart or Charlot asterred to in Egueda, I, 63 (18-20).

1. Art of War etc. 1929, p. 49.

2. This King is Thothmas III (1495 B. C.). Vide Plates XVI and XXIX of Combridge History of India, Vol. I.

3. This Chariot is said to have been presented by Indiau Chariotaers to the Sumeriau soveraign. It resembles the Sauchs Chariof with two wholes and an open box behind. It has one pole with a yoke at the end but the Sauchs Chariot has one long pole in the middle and two short shafts on the sides. The yoke is attached to the middle one. I think the Sauchi chariot resembles in point of construction the bullook-carts used in Konkan and other parts of the Decom.

4. The Barbut Car has four horses yoked in one line. Mr. Date states that "Charlots are engraved on the terra-cota plaque from Bhits and the Copper Inth from Rain (Indo-Arp. p. 339). Like the Eanohi Car they are open on all sides."

5. This study of the Indian bullock-cart and allied vehicles is by no means exhaustive. I have supplied a short summary of it to the Agricultural Engineer to the Government of Bombay in respense to an inquiry from him in this matter in August 1940. I trust, however it would be of some use to laymen, if not to the experts in the field of ancient Indian Culture and Civilimation.

11. Carriage-Manufacture in the Vedic Period And in Ancient China in II21 B. C.*

the residual terrations and the extremation being to be part of the first time.

In the Vedic Index 1 by Keith and Macdonell we get the following information about the Chariot (ratha) of Vedic Aryans:-

- (1) Ratha meant in the Rgveda and later a 'chariot' as opposed to anas (cart) though the distinction is not absolute. Of differences in the structure of the two we have no information, except that the Kha (nave hole) in the wheel of the chariot was greater than in that of the cart.
 - (2) As a rule the chariot had two wheels (cakra).
- (8) The wheel consisted of a rim (pani), a felly (pradhi), spokes (ara) and a nave (nabhya).
 - (4) The rim and the felly constituted the nemi.
- (5) The hole in the nave is called kha.
 - (6) The end of th axle was inserted into kha.
- (7) The term and may denote the extremity of the axle that was inserted in the nave or the lynch-pin used to keep that extremity in the wheel.
 - (8) Sometimes a solid wheel was used.
- (9) The axie (akşa) was in some cases made of (arafu) wood, and round its ends the wheel revolved.
- (10) The axle was attached to the body of the chariot (kośa,), which was also called Vandhura meaning the " seat" of the chariot.
- (11) The chariot of the Asvins is called "tri-vandhura" and "tri-cakra" i.e. a chariot with three seats and three wheels. Zimmer, however, considers such a chariot as purely mythical.
 - (12) Garta denoted the seat of the warrior.
- (13) The pole of the chariot (isā, prauga) was at right angles to the axle. Normally there was one pole on either side of which the horses were harnessed.
- (14) A yoke (yuga) was laid across the necks of the horses. The pole was passed through the hole in the yoke (kha or tardman) and the yoke and the pole were tied together.
- (15) The horses were tied by the neck (griva) where the yoke was placed and also at the shoulder, presumably by traces fastened to a bar of wood at right angles to the pole, or fastened to the ends of the pole,

^{*} Annals (B. O. R. Institute); Vol. XXVII, pp. 288-202.

¹ See Vol. II, pp. 201-208.

if that is to be regarded as of triangular shape, wide at the foot and coming to a point at the tip.

- (16) The words raimi and raiand seem to denote "traces." They may also denote the "reins" which were fastened to the bit (perhaps ipra) in the horse's mouth.
- (17) The driver controlled the horses by reins and urged them on with a whip (kasa).

(18) The girths of the horse were called kakeya.

- (19) Normally two horses were yoked to the chariot but three or four were also frequently used for this purpose. It is not certain whether the extra horse was attached in front or at the side. Perhaps both modes were in use. Even five steeds were employed.
- (20) Horses were normally used for chariots. Sometimes asses (gardabha) or mules (aśvatari) were also used.
- (21) The ox was employed for drawing carts and in fact derived its name "anadvaha" from this use. Sometimes a poor man had to be content with a single steed which then ran between too shafts.
- (22) In the chariot the driver stood on the right while the warrior was on the left, as indicated by his name Savyeştha or Savyeştha (The Greek notices speak of two warriors and a charioteer). He could also sit when he wanted for the chariot had seats and an archer would naturally prefer to sit while shooting his arrows.
- (23) The dimensions of the chariot are given in the Sulba Sulra of Apastamba at 188 angulis (finger-breadths) for the pole, 104 for the axle and 86 for the yoke.
- (24) The material used in the construction of the chariot was wood, except for the rim of the wheel.
- (25) Many other parts of the chariot are mentioned such as Anka, Nyanka, Uddhi, Pakṣas Patalya, Bhūrij, Rathopastha, Rathavāhana but their names are often obscure in meaning.
- (26) The Vedic Index further records the following terminology connected with Ratha (chariot):-

Rathakāra - Chariot-maker, In the Atharva-veda the Rathakāra already forms a caste,

Ratha-grsta - Skilled charioteer. Ratha-cakra - Chariot wheel.

 The chariot used at a bridal procession was made of Shimals wood (Rv. X, 85, 20). In Rv. III. 53 the chariot (egandama) is said to be made of the himber of Khadera tree and the Simplespheree (vide my paper on "The Indian Bullock-cart: Its Vedic and Pre-historic Ancesfors" in the Poons Orientalist, Vol. V, pp. 144-151). Ratha-carsana - perhaps means ' pathway of the chariot. '

Ratha-jutt - " driving swiftly in a chariot " or a proper name.

Ratha-nabhi - nave of the charlot wheel.

Ratha-mukha - fore-part of a chariot.

Ratha-vahana - A movable stand to hold a chariot. The Greeks had such stand on which the chariot rested when out of use.

Ratha-firsa - The head of the chariot.

Ratha-sanga - Hostile encounter of chariots.

Rathaksa - Axle of the chariot.

Rathahnya - A day's journey by chariot.

Rathin and Rathi - One who goes in a chariot (both the driver and warrior).

Rathitara - " good charioteer ", name of a teacher.

Rathestha - Car-fighter.

Rathopastha - the bottom of the chariot on which the driver and the fighter stand.

The foregoing information about the chariot of the Vedic Aryans shows clearly the wide-spread use of the chariot during the Vedic period, for which the lower limit according to Macdonell is 500 B.C. and the upper limit is "not much earlier than 1200 B.C." The references to chariot-terminology collected in the Vedic Index are very interesting as they show the art of chariot-manufacture in a sufficiently developed condition. One, however, fails to notice in these references any detailed description of the chariot-manufacture as we find in Kautilya's chapter on "The Superintendent of Chariots" (chapter XXXIII of Book II, pp. 155-156 of Eng. Trans. of Arthaiastra, 1929). In this chapter Kautilya observes:—

"The functions of the Superintendent of horses will explain those of the Superintendent of chariots. The Superintendent of chariots shall attend to the construction of chariots. The best chariot shall measure 10 purusas 1 (=96 angulus) in height and 12 purusas in width. After this model, 7 more chariots with width decreasing by one purusa successively down to a chariot of 6 purusas in width shall be constructed. He shall also construct chariots of gods (deva-ratha) festal chariots (pusy-aratha), battle-chariots (Sangrāmika), travelling chariots (pāriyānika), chariots used in assailing an enemy's strongholds (parapurābhiyānika) and training chariots.

^{1.} Meyer interprets that a chariot shall have space for 10 to 12 men.

^{2.} Charlots used for festive considers, such as coronation etc. Commentary.

He shall also examine the efficiency in the training of troops in shooting arrows, in hurling clubs and cudgels, in wearing mail armour, in equipment, in charioteering, in fighting, seated on a chariot and in controlling chariot horses.

He shall also attend to the accounts of provision and wages paid to those, who are either permanently or temporarily employed (to prepare chariots and other things). Also he shall take steps to maintain the employed contented and happy by adequate reward (yogyarakşānusthānam) and ascertain the distance of roads."

In the foregoing lines we get some idea about the construction of chariots of different types for different purposes, the war-chariots being of course the main object of the care and supervision of a state officer "the superintendent of chariots." Though Kaufilya lays down the measurements of different chariots he does not describe the details of the construction of the different parts of the chariots. One wonders if there existed any treatise on chariot—manufacture prior to Kaufilya or posterior to him. Had such a treatise been available we would have known more details about chariot-manufacture in ancient India than what we can gather by collecting together stray references to chariots of the Vedic and the post-Vedic period of Indian history. In the absence of such a special treatise, Kaufilya's remarks quoted above have a special historical significance for the history of chariot-manufacture in Ancient India.

Let us now see the progress of chariot-manufacture made in outside countries synchronously with the Vedic period. In this connection I shall record in this paper some evidence of a Chinese text of B. C. 1121, which describes in detail the manufacture of carriages as current in China at this time and even before this date. This text is no other than "The Ceremonial Usages 2 of the Chinese, B. C. 1121," as prescribed in the "Institutes of the Chow Dynasty Strung as Pearls" or Chow Le

Some take this to mean " to keep the employed at a safe distance form the intrigues of enemies" — Commentary.

^{2.} Translated from the original Chinese, with Notes, by William Raymond Gingsit, Interpreter to Her Majesty's Consulate, Poo Chow Foo, London, 1852. Lin Kow Hwale, the teacher of the Translator has added a Preface to the Translation, from which I note some particulars:—(1 | England had commercial intercourse with China from the beginning of the Missg dynasty (1643). In 1842 a British Consul was established at the Five Ports. Englishmen were allowed to employ Chinese tenchers. Gingell went to China from India in a troopship in 1842 and while at Nanking studied Chinese poetry, writings and literature. The Preface was written in 1849.—The Preface by the compiler, Hoo Peth Scang printed in this translation is dated 1767. This Preface states that the Chow is classic originated in 1868 B. C.

Kwan Choo" (being an abridgement of the Chow Le classic by Hoo Peih Seang, designated Mung Chew). Gingell states that his translation affords "some insight into the forms and usages of the Chinese, who are to the present day but little changed from what they were nearly 3000 years ago. Few would give them credit for so much civilization at this remote period." In view of these remarks about the antiquity of the Chinese classic I was tempted to go through Mr. Gingell's translation, keeping constantly in my mind the state of Indian civilization about 1000 B. C. as disclosed by the Vedic and early post-Vedic literature. Among other things the remarks in this Translation about chariot - manufacture or rather carriage - manufacture in China 3000 years ago interested me very much in view of my interest in the history of Indian carriage - manufacture form the Vedic times onwards. I shall, therefore, record below the information about the Chinese chariots and other vehicles as disclosed by Mr. Gingell's Translation. Pages 18-26 are devoted to carriages and banners which " required due distinction" like the " palace dresses and other majestic pomps" of the King.

Page 18 - "The Kin Keu had charge of the orders of government as regards the State Carriage."

- (1) Yu loo was a "gem-ornamented chariot" used on the occasion of offering sacrifice.
- (2) Kin loo carriage was employed on great occasions.
- (3) Seang loo chariot was used when going to audiences.
- (4) Kih loo carriage bound with leather was used on military occasions.
- (5) Muh loo chariot was employed on hunting expeditions. These were five equipages of the King.
- (1) Chung tee chariot was used by the queen when she accompanied the King to sacrifice.
- (2) Yeu tee carriage was used by the queen when she visited the King.
- (3) Gan Ken equipage was made use of when the queen visited the King in court.
- Page 19 (4) Tee Keu chariot was used by the queen when she went to pluck the mulberry.
 - (5) -- Neen Ken carriage was employed by the queen when she moved within the precincts of the palace.

These were the five equipages of the queen.

— Officers beneath the King made use of —

- (1) Hea Cheun a carriage with various colours and carved.
- Nobles used (2) Hea man a carriage painted with various co-
 - High officers used (3) Meh Keu carriages varnished black and not painted.
 - Sze made use of (4) Tseen Keu a carriage with no colour excepting the original colour of the wood.
 - People made use of (5) Yuh Keu a carriage with a box behind for stowing baggage etc.

Thus each carriage had its distinctive uses high or low. Teen loo officer was "inspector of chariots." The Keu poh looked after attendant coaches attached to the war chariots of different varieties. The Jung Yew looked after military weapons and attendants attached to the war-chariots.—The text then mentions several officials with several duties connected with King's chariots.

Page 20 — The most honourable of all was Tas Yue "chief charioteer" who was attached to Yu loo chariot which was accompanied by a special tune when moving slowly, and by a different tune, when moving rapidly; bells on the trappings of horses and on the carriage keeping due unison and time to the tune played.

The foregoing information about the different types of chariots and their distinctive uses shows the highly developed condition of the chariot-manufacture. The following extract is, however, highly informative. It takes a general survey of the principles of carriage-building as it was carried on 3000 years ago:—

"We now come to notice the manufacture of the carriages. The book Kaou Kung Ke states that the yew yu she (Imperial Title of Shun-2254 B. C.) esteemed pottery.

The Hea how she (Imperial title of Ta Yu-2004 B. C.) delighted in handi-craft and building; and the men of the Yin dynasty (1872 B. C.) esteemed house hold furniture. The men of the chow dynasty (1121 B. C.) paid particular regard to carriages. Hence there was a multiplicity of workmen employed in their manufacture. Carriages were in abundance. Taking a general survey of the principles of Carriage-building, it was desirable that the parts of the wheel should be solid, firmly joined, and well fitted, and that the wheel should be exactly rounded, so that it should be light and firm upon the ground: were it otherwise than solid and well joined, it would not be durable; and were it not accurately rounded it would not

cevolve quickly. If the wheels were too high, persons would find difficulty in getting into the carriage; and if on the other hand they were too low, the vehicle would weigh and press down upon the horse when ascending a slope. To this end, the wheels of the war-chariot (Jung Keu) were six covids six inches in height; the "hunting carriage" (Teen Keu), six covids three inches and the wheels of the carriage in common use were six covids six inches. Those wheels which were six covids six inches in height had the nave or perforation for the axis three covids three inches high and the flat bottom of the body of the carriage with its two Leang puh (=two pieces of wood on either side, which supported the body of the carriage and under which the axle lay) placed on the top thereof, formed altogether a height of four covids 1 from the ground. The men were in stature eight covids 2 and the steps for getting up and down required to be in due proportion. The Lun jin made the wheels, and the To hue prepared the three materials (for the wheel), a proper season being fixed for the preparation of each. The nave (Kuh) was required to revolve quickly, the spokes to be straight and firm and the outer band of the wheel well braced and durable. On looking at the wheel a little distance off, it was desirable that it should revolve gracefully and smoothly; and when looking at it close, that it should be accurately rounded, and rest lightly on the ground : nothing else was required but that it should be circular. The spokes, viewed from a short distance should appear small and fine; and on looking closer, the ends should exactly fit the outer band of the wheel: nothing else was required but that they should be all set in evenly, and be firm and straight. On looking at the nave at a short distance, the projecting part of it should appear convex, and on close examination its lining, or casing of leather should be evenly and firmaly bound on, without loose edges: nothing else was required but that it should be suitable for speed. On looking at the convex side of the spokes (Kang), it was desirable that the ends which entered the outer band of the wheel should be correctly adjusted; and on examining the ends which entered the nave, that they should be well and regularly set: then, although the wheel might be broken, they would not be distorted (or out of place). The rule followed in cutting the nave was to mark off exactly the ying and yang (male and female) principles of wood. If the nave of the wheel were too small and long, it caused the spokes to be much crowded; and if too large and short,

^{1.} A Covid is supposed to have been somewhat smaller than the one now in usa-

^{2.} A Covid is 10 Chinese inches; and 2 covids 6 inches = 1 yard English; so that the stature of the men was upward of 9 feet.

it was unsteady and dangerous. The nave was required to be straight in appearance, and the building evenly put on. When glue was made use of it was required thick; and when sinews were applied, they were twisted many times. When the wheel was required for travelling over marshy places, it was essential that it (the rim of the wheel) should be thin and sharp; and when for hill travelling, flat. The compass was used to determine its true circle, and the square to ascertain distortion. The wheel was suspended or balanced to determine the straightness of the spokes; and it was placed in water to observe if it became equally immersed; I and millet-grain was used to measure the holes for the spokes, in order that they should be all of one size; the two wheels were weighed by the balance to ascertain that they were equal.

Hence, to use the compass, apply the square, mark the gravity of water, suspend measure and weigh was denominated Kwo Kung, "excellent work."

The Keu jin made the carriage commonly in use among the people. The handle of the axe used was three covids long and the nave of the wheel was half of the length of this, or one-sixth. The spokes were one Ko "axe-handle", and a half in length or four covids five inches.

These were the established rules for the large carriage or cart. When this vehicle was required for travelling over marshy ground, the nave was made short, and when over hilly ground, long. For travelling over marshy places, the outer circumference of the wheel was required to be made of wood bent outward on itself (the timber being cut in half); and for hilly ground it was bent laterally or sideways. The wheel was three Ko or nine covids in height, the carriage-box behind eight covids, and the yuen, or shafts were thrice as long as the wheels were high, or twenty-seven covids. This differed from the pole of the small military carriage, as the latter was only fourteen covids four inches long. The space between the poles, or the shafts, was six covids and the yoke was six covids long. This differed from the yoke of the small carriage, which was six covids six inches.

Now the large-carriage shafts were called yuen and the small-carriage pole chow: the yoke of the one (gih), differed from the yoke of the other (Hang); for in the large carriage 2 two shafts were used with one ox between them; hence the gih was shorter, and the space between the

^{1.} That one part was not heavier than another.

^{2.} The large corriags was drawn by one on, the small carriage by two or more horses with a pole between them.

shafts was necessarily more narrow. The small carriage (see cut) had one pole with a pair of horses on each side of the pole; hence the yoke was required to be long, and the space where they were harnessed breader. Thus the yoke of the larg—carriage and the yoke of the small one, although of similar use were essentially different.

The Keu jin made the boby of the carriage and the length of the yoke, or bar, were all six covids six inches. The three were alike; hence

arose the saying " of three proportions. "

These were the established rules for the small carriages (hunting coaches and chariots).

Now as regards the fashion of the vehicles. The body of the Tseen Keu "plain carriages" sloped inwards from the bottom to the top: the body of the Ship Keu "crnamented carriage," sloped outwards from the bottom to top: all that was required to be circular was made so by means of the compass: all that was desired to be square was ruled by the square; all that was required upright was tested by the plummet-line; and the yokez were of equal weight, as determined by their gravity in water. The straight portions were like growing sprouts, and the portions joined seemed part and parcel of the whole.

The chow jin made the poles; the chow served the purpose of the yuen, or shafts; and to this was hooked the Hang of the small carriage to which the horse was fastened: this was fourteen covids four inches in length. There were three modes of making it; and the axle-tree or piece of cross wood on which the wheels were set (chuh) had also three distinct principles on which it was made. The pole for the large horse Kwoma was four covids seven inches deep in the curve; that for the Teen ma four covids; that for the Nooma three covids three inches. Thus the pole was curved, but it was desirable that the bend should not be abrupt (like a bent bow).

Now as regards the shafts of the large carriage. If these were too low, it would have been a difficult matter for the ox to ascend a slope; and if the animal were urged on, it would cause the carriage to upset backwards readily: this would happen from no other cause than that of the shafts being straight without any bend. Hence although the shafts of the large carriage might be exactly of a proper height on level ground, yet on ascending a slope, if they did not press down upon the ox they would lift the animal up: this would arise from no other cause than that of the shafts being straight and without curve. On coming to a declevity, if the shafts were not lifted up from off the beast, the breaching would inevitably

strike against the hind quarters of the ox, from no other reason than that the shafts were straight and without curve. Thus the shafts of the large carriage must also have a curve in them as being highly necessary. The pole of the small carriage required to be firm and tough; were the curve of the pole too deep, it would readily break; and if too shallow, it would press too much upon the horses. If the pole was adapted to the horse's backs, the motion of the carriage was equalized, and the vehicle lasted for a long time. When all these points were attended to, the case of the occupant is secured. The pole was required to be curved without angles (uneven points) and the grain of the wood to be continuous and unbroken. In front was the horse, which had to be considered and behind sat the man, who likewise claimed consideration. After a whole day's travel the attendant would then be untired; the horse, although he had passed over a thousand le, would not be juded; and the clothes of the charioteer would not be rubbed or worn, even after a whole year : this from all being well adapted. On requiring the horse to put forth his strength in ascending a hill, the pole would be an assistance to him when his strength became exhausted.

The bottom-board of the carriage was square and in this respect resembled the earth (alluding to the four cardinal points). The covering or umbrella above was circular, and resembled the heavens. The spokes of the wheel were thirty, corresponding with the days of the month, and the ribs of the covering were twenty-eight in number, agreeing with the twenty-eight constellations. The Lung Ke had nine pendant streamers and resembled the Ta ho constellation; the Neaou yu bird ensign had seven pendant streamers, and resembled the Tun ho constellation; the Heung Ke had six pendant streamers, and resembled the Fa constellation, Kwei shay, tortoise and snake flag, had four pendant streamers and resembled the ying ship constellation, and the Koo sing, or curved banner, with its bent handle, resembled the Koo constellation."

The foregoing long extract amply shows the advanced stage of carriage—manufacture in China in B. C. 1121. The mechanics of carriage—building, so graphically described in the above extract has, I believe, no parallel in Sanskrit literature of the Vedic and post-Vedic period though the Arthaidstra makes some approach to this question by enumerating different kinds of chariots and their measurements. In the absence of any such description about the Vedic chariots we cannot understand the mechanics of the vehicles. If the date 1121 B. C. for the Chinese classic from which we have taken the above extract is correct, we have to observe that the Chinese development of the art and mechanics of carriage—

manufacture had no contact with the development of the Vedic chariot. Scholars tell us that "the earliest story of Sino - Indian contact 1 is connected with Emperor Hiao - Wu (140-80 B. C.) of the early Han Dynasty" and the " starting point of Sino - Indian intercourse is generally put at A. D. 64."3

In his recent book on " War in Ancient India" Prof. V. R. R. Dikshitar has recorded some valuable information 3 about chariots, from which I note below a few points:-

- (1) The chariot was an indispensable instrument of war in the days of the Vedas.
 - (2) Originally the warrior was his own charioteer.
- (3) For the first time the Aitareya Brahmana mentions a charioteer as distinct from the warrior.
- (4) The Taittirlya Brahmana mentions chariot makers or rathakaras.
- (5) The Mahabharata mentions official charioteers similar to the custom depicted in Assyria on the marbles from Nineveh.
- (6) In the 4th century B.C. two warriors are seen in each chariot besides the charioteer (This is testified by Megasthenes).
- (7) The Ramayana (yuddha. 106, 16-20) lays down tests for ideal charioteer.
- (8) The Markandeya Purana refers to a warrior versed in eight modes of fighting from a car.
- (9) The Arthasastra refers to Rathadhyaksa or superintendent of chariots. Six varieties of chariots are mentioned. The chariots were twowheeled, four - wheeled 4 and eight - wheeled. The officer in charge of the chariots was to maintain accounts relating to the construction of chariots and other matters.
- (10) Megasthenes refers to Indian chariots drawn by oxen on the march.
- (11) There were chariots drawn by asses, bulls, mules besides those drawn by horses.
 - 1. Vide p. 4 of Indian Liberature in China by P. K. Mukherji, Calcutts, 1931.

2. Ibid, p. f.

S. Wor in Ancient India (Macmillan & Co., 1944) pp. 157-166.

4. Vide Transls of Pa-heies (899-414 A. D.) Trans. by H. A. Giles, Cambridge, 1925, p. 47-Pa-haisn describes a ceremonial car, four-wheeled and of five stories, over 20 feet in height, with silk banners etc., used for the annual procession of images in Magadha (Pațalipuirs).

- (12) Chariots of different types and materials are mentioned.
- (13) Śukra mentions a chariot of iron. The Harivamia mentions the iron car of Danava Talā having 8 wheels, axles and poles. It was 2 miles in length and drawn by 1000 mules.
- (14) From the time of the Epics to the epoch of the Puranas the art of fighting from chariots had developed a high degree of perfection.
 - (15) Each chariot was marked by its ensign and banner.
- (16) Besides flags, umbrellas (chattra, ātapatra) and fans were a part of the paraphernalia of the war-chariot.
- (17) The use of war-chariots declined gradually. In Bana's description of Harşa's army (7th century A. D.) no chariots are mentioned. No chariots are mentioned in the Küram Pallava grant of 650 A. D. which mentions elephants, horses and footmen.
- (18) In the history of the Cola kings of South India mention is only made of the three divisions of the army but the chariots are not mentioned. This omission indicates that they must have become obsolete by that time.

In the account of chariots given by Prof. Dikshitar no reference is made by him to the Chinese chariots. If chariots had become obsolete about the 7th century A. D. as a regular part of the army we should expect their descriptions in subsequent records as only vehicles for civil use of the King. In fact in Someśvara's Mānasollāsa (Vol. II, G. O. S.) composed about A. D. 1180 we find such a chariot mentioned:—
Page 140— " wasaalizi-al at granagunfaa: 1

मत्तकारणके मंद्रपेक्षित्रितः परिश्लोभितः ॥ ५५ ॥ मानावर्णपताकाभिभ्रोजितः सुरदाक्षकः । उत्तमः स्पन्दनो याने नृपाणामिव निर्मितः ॥ ॥ "

This is a description of the King's vehicle with two wheels and drawn by two or four horses. This chariot was not a war-chariot but a sort of carriage for ceremonial and other uses.

In the राजस्यवहारकोश composed by Raghunatha Pant Hanmante about A. D. 1676-77 under the orders of the Maratha King Shivaji the Great there is a section called चतुरक्षको (Vide p. 155 of विवयस्थित्रकोष, ed. by D. V. Apte and S. M. Divekar, Pouna, 1925). In this section, while about

^{1.} The Missonskin (G. O. S. Beroda, 1989) Vol. II, p. 189, refers to king's vehicles (यान) viz.(1) दोला, (2) सुन्तासन, (३) हस्ती, (४) करिणी, (३) अश्वतरी, (६) हम, (१) स्थ, (৪) नीः, (२) प्रकृत.

5 verses deal with terms pertaining to elephants and about 33 verses are devoted to the horse-terminology. Only the following three lines are devoted to the tunes:-

" स्थक्षाला तु बाहिलीमहाल इति कीर्तितः । बहिली स्याध्यबहणै बहिक्बानस्तुसारिषः ॥ गाडा शकट हृत्युक्तः प्रतोदप् दुमणी भवेत् । "

Here the ew or chariot is included in the sagged merely as a matter of courtesy. It had ceased its function as a fighting unit of the ancient Indian army but was maintained more for pomp than for use as an organized force as we find it in Kauţilya's time.

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Some time ago the Health Officer 1 of the Poons City Municipality suggested in a communication to the press that Hindoo women should cease to wear the nose-ornament called " nath" because this custom tends to keep the nose unclean and the ornament becomes a nuisance to the health of the wearer. Some controversy raged in the press as a result of the above suggestion. I had then a mind to examine the whole custom historically without suggesting in the least that Hindu women should discard their nose - ornament of whatever shape or value, because such a suggestion may lead to reaction and we may find a revival of the custom in places where it has ceased to keep its hold either on the grounds of economy or owing to educated indifference to excess of ornament. I could not carry out my intention to record the historical references to the nose ornament because of the scattered nature of such references and the difficulty of getting exact chronology for them. As, however, a beginning has got to be made in the interest of our sisters. I shall record in this paper the references gathered by me regarding the nose - ornament without prejudice to the desirability of the continuance or otherwise of the custom now in vogue.

The Indian nose - ornament appears to have attracted the attention of foreigners in the 17th and 18th century. Lt. Edward Moor on the Bombay Establishment of the East India Company, who wrote his Narrative 2 of the British co-operation with Parashuram Bhan Patwardhan

[&]quot; Annals (B. O. R. Institute), Vel. XIX, pp. 313-384.

The late Khan Bahadur Dr. Korshaw Dinshaw Khambata, M. B. E., L. M. & S., L. R.
 P. S., who was Health Officer to the Poona-city Municipality for many years. Unfortunately he is now no more as he died on 19-6-1936.

^{2.} Narratics of the Operations of Captain Little's Detachment and of the Maratha Army commanded by Purseram Bhow, during the late confederacy in India against Nawab Tipoo Sultan Bahadur, By Edward Moor, Lieutenant on the Bombay Establishment, London, 1794, Pp. XV + 526. The following particulars about Edward Moor are noted on p. 293 of Dictionary of Indian Biography by C. H. Buckland, London, 1906;—" Moor Edward—(1771-1848) Major; born 1771. Went out to India in 1782. Reached Madras 1783. Served with the Maratha Army against Tipoo, 1790-91 at Dharwar, Doridrug, Gadjnur; Wrote 1794 an account of the operations: officiated as Q. M. G.; Garrison Store-keeper I. c. Commissary General, at Bombay, 1799-1835; retired in 1805; compiled the military orders and regulations; Member of the Asiatic Society of Bengal 1796; P. R. S. 1806; P. S. A. 1818; original Member of the Royal Asiatic Society, which he helped to found; member of other learned Societies; Published his Hissin Pasifaces 1810; Wrote Hinda Infanticide 1811; Oriental Fragments 1834; and on India in Cyclopaedia; died Feb. 26, 1848"—The Centenary Review of the Asi. Soc. of Bengal (1784-1885) Calcutta 1880, p. 162, records E. Moor's paper contributed to fa. Res. VII, 883 on the Chinebvad Samathāna near Fooms.

against Tipoo Sultan between a. D. 1790 and 1792 and who was a minute observer of men and things not to say an accurate and erudite scholar, makes the following observations on nath in his chapter on Historical and Descriptive Particulars of Canara and the Canarese (Chap. XXI) pp. 288-289:—

"In common with most other sects of Hindoos, the women wear an ornamental ring or jewel in their nose, called in Hindvi nutt. A great deal of money is sometimes expended, and a great deal of taste sometimes displayed, in the execution and design of this favourite appendage, which whatever mere Europeans may think, must be allowed a very becoming, and almost irresistible addition to the nose of a pretty face. This ornament is sometimes, but here not very frequently, affixed to the septum of the nose, but it then assumes a different name and form, and we think, loses all its effect, there not being an equal opportunity of displaying either taste or judgment, as in the circular trinket, suspended in the usual style.

Tavernier 1 says, (Persian Travels, p. 86) the Arabian women bore the septum only for the admission of the ring. "The Arabian women only bore the separation between the two nostrils, where they wear hollow rings, as well to spare cost as for lightness; for some are so big that you may almost thrust your fist through them. Beyond all this, the more to beautify themselves, they make a round ring around their eyes with a certain sort of blacking; and as well men as women, in the desert, put the same near their eyes to preserve them, as they say from the heat of the Sun."

Hanway (Travels in Persia, Vol. I, p. 230) speaks irreverently of the nutt, as it is worn by the Persian ladies, but he was too little of an Asiatic to feel its fascinating effects; and from the unpleasant circumstances attending his journeyings in Persia, it would not be surprising if he were so displeased with everything in that quarter, as to speak irreverently of the ladies also."

The foregoing references from the Travels of Tavernier and Hanway prove that the custom of boring the septum of the nose and introducing a ring into it is of Arabic origin. In the same way the custom of boring one of the nostrils and introducing the nuth into it appears to have been current in Persia as observed by Hanway. From the evidence to be

Tavernier began his numerous journeys in the East in 1632-2. Soon afterwards (1842-83) he returned east-wants and reached India by way of Ispahan (Vide p. 62 of Cambridge History of India, Vol. V. British India (1697-1858) Cambridge, 1929].

recorded in this paper it will be apparent that the existence of the nuth in India and references to it in literature and representation of it in painting and sculpture are associated with the post-Muslim period of Indian history and consequently the conclusion becomes irresistible that the nuth or nose-ring has been imported into India from a foreign source.

In a work published in London in a. p. 1832 on the Customs of the Moosulmans of India? we find the following references to the nose-ring:-

Page 210— While dealing with the Mohurrum Fuqueers "the author states that one of the 47 Fuqueers called "Khogeer Shah" (king saddle) goes along repeating a verse somewhat to this effect:—

"In every lane, in every street,
The heaps of sweetmeats rise;

Nose-jewelled* damsels, not less sweet,
View them with longing eyes"

(* the original expression is "nuth - (or Boolaq -) lady ")

Page 275 - The Mahomedans perform certain vows and "in the same manner in the name of renowned individuals they put on their children nuthness etc."

Page xxi of Appendix — "Ornaments worn on the nose. The nose has its share in the decoration of the Hindoostanee ladies and bears several

^{2.} It is a carious coincidence that just when this paper was being drafted Dr. A. S. Altekar's article on " Dress and Ornaments of Hindu Women" (Journal of the Benares Hindu University. Vol. II, 1988, pp. 399-122) should reach my hands and corroborate my view about the foreign origin of the ness-ring worn by Hindu women. I shall indicate some of Dr. Altekar's statements on the subjects :- (1) The noss-ring is a sign of Saubhages or married bliss, yet in the Natpalastra (23rd chapter) it is not included in the exhaustive list of ernaments of women. (2) Sanskrit poets and dramatists show no sequalntance with the organisms. (2) There is no word in Sanskrit language to denote the organisms. (4) The words siaths, nathis, suthat natthis, nathdhag found in Indian vernaculars are derived from the Prakrit word nuttha, meaning the nose-string used for controlling an animal. (5) The nosering is not found in the Sculptures at Udayagiri, Bhuvanesvara in Orissa, Bodhagaya, Patma in Bibar, Bharhut and Sanchi in Central India, at Mathura in U. P., at Taxila in the Punjab, at Ajanta, Elora, Badami in the Deman and the Amraoti in the Madrag Presidency, though these sculptures show a rich variety of women's ornamente. (5) It is clear that the mose-ring was unknown throughout the whole of India during the entire Study Period. (7) Hindu sculptures of Puri and Rejoutane of the post-Muslim, period, begin to show the nose-ring for the first time. (S) The most ring seems to have been clearly borrowed from the Mahomedana. "It is a mystery how this ornament of foreign origin should have come to be regarded as the most important insignia of Scrubbagua." (pp. 420-410 of the J. H. H. Unic. Vol. II).

^{2.} Quescen-a-Islam of the custom of the Moosulmans of India by Jaffur Shurreef and G. A. Herkleis, Landou, 1883. The copy available to me for reference has the autograph of "F. Edward Hall."

ornaments. Nath-an ornament passed through the left nostril, consists of a piece of gold wire as thick as a small knitting needle, with the usual hook and eye, and furnished at the centre or nearly so, with several garnets, pearls etc. perhaps to the number of seven or more separated by a thin plate of gold, having generally serrated or scolloped edges, and being fixed transversely upon the wire which passes through their centres as well as through the garnets, pearls, etc. The common diameter of the circle of a nath is from one inch and a half to two and a half. coast of Coromandel a somewhat similar ornament is worn in each year by men of respectability (called Pogool) " Boolaq - a nassal trinket flat in form etc "

The frontispiece of the above book is a plate showing " An Indian Woman decked out in her jewels" which include among others the Nuth and Boolaq. This plate is dated September 1832.

The above references give us a clear idea about the type of nose-ring

or nath worn by Muslim women about a hundred years ago.

In a work on music called the Sangraha-caldamani by 1 Govindacarya composed before a. D. 1750 or so we find in the list of ragas the names " Nasamani" and " Nasikaldasani" in the following line: - 2

" नासिकाभूषणी मेळाबासामाणरजावत "

The term Nasamani means a nose-jewel and hence the term has been applied to a musical raga by a metaphorical employ of the word.

In the poem called the Parnalaparvata-grahanakhyana 3 or the capture of the Panhala fort near Kolbapur by Shivaji's men there is a des-

द्रश्ने शुकास्यसंसक्तपद्भवशिवसाम् ॥ ३७ ॥ १

The date of composition of this poem is A. D. 1673 according the to Editor. The Shipseparakarabola composed by Raghunatha Pandila for the Maratha King Shivaji the Great has the following verse about the AU:-

(कार्यस्थानवर्गे verse 18)— " नासामणिनेथोमुकाफ्डमोतीफुलीनितु ।

नासापुष्य, बाहमणिवीनुबंधामिषायकः ॥ १३ ॥ "

I am thankful to Mr. Y. R. Date, Editor Makarashira Sabdakofa for drawing my attention to this verse.

In a work called Hamsavelass by Srt Hamsamitthu (G. O. S. Baroda, 1986) bern in Sameat 1794 (= A. D. 1738) there is a section called " alambaranepacars (pp. 925-97) in which we find a reference to the none-ornament as follows :-

^{1.} Adyar Edition, 1928 - Vide Intro p. xxxiii - the date of composition is recorded as " not later than the latter part of the 18th century. "

^{2.} Ibid, p. 148.

^{3.} Edited by. S. M. Divelar. Vide chapter IV, verse 37 which reads as follows :-

[&]quot; नासम्बन्धापनं यस्या दतीष्ठयतिपारलम् ।

cription of the image of the goddess Bhavani at Pratapgad in which the goddess is shown as wearing a nose-pearl or nasa-muktaphala. It will thus be seen that in Shivaji's time the nose-pearl, which evidently presumes a nose-ring, has entered the sacred precincts of the Hindu goddess Bhavani, the tutelary deity of Shivaji in spite of the foreign origin of the ornament.

In a Kangra miniature 1 (depicting the adoration of Siva as 'Destroyer' by Kṛṣṇa, Brahma and other Hindu Gods and ṛṣis) available in the Indian Museum, Calcutta, the goddess Pārvatī is shown seated holding Kārtikeya. In this picture by a Bajput artist we find a nose-ring with three or four pearls in the nose of Pārvatī.

In an illustrated Ms of the Bhagavata Purana 2 from Jodhpur dated A. D. 1848 we find pictures of ladies wearing the nose-ring with three pearls. Edward Terry,3 the chaplain of Sir Thomas Roe who visited India between A. D. 1818-19 gives a very accurate description of male and female costume of the period. He describes the ear and nose-ornaments of Muhammdedan women as follows:-"Round about their ears are holes made for pendants and every woman hath one of her nostrils pierced, that there, when as shee please shee may weare a ring." In the early Deccani paintings described by Dr. Motichandra the women wear silver rosettes on one side of the hair, ear-rings, necklaces, nose-rings (nath) armlets, bangles, and anklets.4

From the 17th century we may now go to the 16th century and record a few references to the nath. In a Ms5 of the commentary of the Kiratār-juniya by Ekanāthabhatta copied in Samuat 1689 i.e. A. D. 1683 we find

^{&#}x27; लल्मीक्तिक्युगलोखितामिः अद्यासनिदर्शामः नासाभूषाभिः नासिकाः परिष्कृत्यः " The women-disciples of the guru are required to present themselves before him in their best attire and ornaments. On p. 27s we find a description of the sportive behaviour of these ladies, one of which is said to be putting her ornaments wrongly on the different parts of her body ("क्ष्यपादी क्रीभूषण क्या नासाभूषा न, घोषायामङ्गुलीयकम् etc. ").

^{1.} Vide Gape's by Alice Getty, Oxford, 1986. Plate 9b and Page 34.

^{2.} Vide M. R. Mujumdar's article on this MS in the Navacelana (in Gujarati) June 1988, Calcutta. Some of the illustrations are reproduced in this article. Vide also his Jaina Citra-Lalpadruma, Baroda, 1936, Plate C, which contains a picture of Santidaes and Kapurial is shown with a safe in her nose. The date of this picture is Samvat 1685 — A. D. 1629. Vide p. 215 of the volume.

³ Early Travels in India by Edward Terry, pp. 308-209 as quoted by Mr. Motichandra (Vide Sembuy Unio. Journal, Vol. VII, Part 1, p. 118).

i. 16:d, p. 114 - Dr. Motichandra's article on " Three Deceant Paintings on cancas " in the Prince of Wales Museum, Bombay.

^{5.} MS No. 179 of 1879 80 in the Govt. Van. Library at the B. O. R. Institute. Poons, The date of copy is recorded as Suspend 1639 and Suku 1805 = A. D. 1883.

Alte seems

the picture of the goddess Sarasvati in colours wearing a nose-ring with two or three pearls. In South India in the Travancore State some mural paintings! belonging roughly to the 16th century were discovered some years ago. They have been reproduced by the Archaeological Dept. of the Travancore State in their report for 1934-35. In Plate 2 we find two figures of women wearing naths. In Plates 1 and 3 also we notice in each two figures of women wearing nath. These mural paintings were discovered on the walls of an old palace in the Travancore State.

Evidence of the existence of nath in South India in the 14th century is found in the mural paintings2 on the walls of the Tiruyambadi shrine in the Sri Padmanabhasvami temple, Trivandrum belonging to the 14th century and depicting a music party of women etc. Many of these women wear nose-rings (with three pearls) in their left nostrils as is clear from Plate 4 of the Travancore Archaeological Report for 1986-37.

Dr. Altekar observes that there is no word in the Sanskrit language to denote the nose-ornament. This remark is true enough but we find that the deficiency was made good by later Sanskrit writers by adopting the phrases like " nāsāmauktika " " nāsāgramuktāphala, * " nāsāmani " as will be seen from the collection of verses dealing with "Nasabhaşana" in the Subhaşitaratnabhandagara.3 One of these verses is identical with verse No.

^{1.} Vide Travassors Archaeological Report for 1984-35, pp. 5, 6.

^{2.} Vide Report of Travancore Archaeo. Dept. for 1986 37, dated 15th February 1938, page 1. Vide Plate I facing page 6 depicting the " relici of mural painting of Tirusampadi Shrine, Trivandrum . Page 6-These mural painting are considered to belong to the reign of the Travancore King Aditya Varana Sarvanganatha (14th century A. D.) who was a great patron of art and letters. I be Sanskrit inscription emeraved in the shrine records that King Sarvanganatha constructed at the town of Syanandura (Trivandrum) the shrine of Krana, the gorale, a mandapa and a diplkagrau in the Saka year 1296 corresponding to A. D. 1374-75. These newly discovered relies comprise mustly figures of woman in different kinds of drapery and wearing many varieties of jewelry among which the south is prominent. In Plate 4, I find about 9 women abown warring stose-rings with pearls.

^{8.} Edited by K. P. Parab, N. S. Press, Bombay, 886, pp. 485-86.

^{ं (}नासाभूषणम्)

⁽¹⁾ नासामीकिकमबले किमचरविम्बेन विद्रमं कुरुषे। दृष्ट्या गुझाबीजं किव जिव भूयस्तदेव हसितेन ॥ १२५॥

⁽²⁾ खेडमागरे वसतिकतिसमाकं तदन मायात । आन्दोलनच्छकारिह निवास्यन्तीय मौक्तिकानि विद्यान् ॥ १२६ ॥

^(3) सुधामयोऽपि क्षयरोगशान्यै नासाप्रमुक्ताफलकञ्छलेन । अनक्रमंबीयनहर्षिशिक्तम्याम्नं ते पियतीय चन्द्रः ॥ १२७॥ (continued on the next page)

8305 quoted in the Śārngadharapaddhati¹ composed by Śārngadhara son of Dāmodara, grandson of Rāghaya and great-grandson of Hammīra Bhūpati

- (4) आकाशात्पतितं पुनर्जनिषी मध्ये विरं संस्थितं पश्चाद्दुःसहदेहरत्श्रजनितक्केशान्तितं मीक्तिकम् । बाले बालकुरङ्गलोचनयुगे घोरं तपः संचर कासासूपणतासुपैति सम्ब ते विस्वाघरापेक्षया ॥ १२८॥
- (6) अस्याः कामनियासरस्यभवनं बक्वं विलोक्यादरा-विकित्येव सुचारकः प्रियतमं भूमीगतं शोभनम् । नासामीकिकवितवेन कविरा तारापि सा रोहिणी मन्ये तदिरहासहिष्णहृदया तस्तिविव सेवतः॥ १२९॥ "
- 1. From the six verses quoted above I have been able to identify No. 3— " सुनामगोऽनि... वन्द्रः " It is identical with stanza No. 2305 in Sårpgadhavapaddhaff (Peterson's Edition. 1888. Vol. I-Tert) There it is mentioned as " वेद्यनाग्रह्म, " This stanza is, therefore, carrier than the date of the author of the Sårpgadharapaddhaff.

In Vallabhadeva's Subha stavals (18th century according to Keith HSL, 222) we find the

following reference to नासामी।सनः -

Stanza 2187 (Peterson's Ed. 1886) -

" आदी मञ्जन नीस्कारतिलकं नेत्राञ्चनं कुण्डले मासामीकिककेशपाशरचना सकञ्चकं नृपुरी । सीगन्थ्यं करक्ष्कणं चरमयो रामो रणन्मसत्त्व । ताम्बूलं करदर्पणं चतुरता शृङ्कारकाः धोडश ॥ "

Stanza Itos -

" अस्याः कुरोशयदशः शशिशुभ्रशुभ्रं नासाम्बर्ति नवमै।क्तिकमाचकास्ति । "

Stomon 2504 -

" मुकाफ्डे शशिवमस्य मुखस्य तस्या हेमोर्मिकान्तगतमञ्जति नाविकान्ते ।"

-- " पं० जोनकस्य "

Stansa 1506 --

" आदयानतामुपगतोस्य दवा चकास्ति नासाममीकिकमिषाटमृतस्य किन्दुः॥"

— " भी वकस्य ³⁵

Stanza 17 --

" नासामे नवमै।क्तिकम् "

The above references have been pointed out by Mr. N. N. Das Gupta in his article on "Nove-Ornaments in India" (Calcutta Review, May 1987, pp. 142-144). In this article Mr. Das Gupta refutes the view of Mr. N. B. Divatia (JASB, 1948, New Series, XIX, pp. 67-70) that "we find no mention of the nose-ring in Sanskrit literature, lexicons, included".

of Sakambhari country. I Sarngadhara introduces the stanza with the endorsement "Vaidyanāthasya" which indicates that the stanza is a work of Vaidyanātha, a poet of an earlier date. The question now arises what is the date of this Vaidyanātha? Though I cannot answer this question conclusively I can at least push back the lower limit for Vaidyanātha's date from a. d. 1563 to about 1258 a. d. because this very stanza is found quoted in the Sāktimuktāvali? of Bhagadatta Jalhana and there also it is stated to be the work of Vaidyanātha (Vaidyanāthasya). I Jalhana, son of Laksmīdeva was like bis father minister of Kṛṣṇa who ascended the throne in a. d. 1247 and to whom the composition of the Sāktimuktāvali, also called Subhāṣitamuktāvali is ascribed. According to Mr. E. Krishnamacharya, the Editor of the Sāktimuktāvali, the work was composed by a physician of the name Bhānu in 1258 a. d. or Śaka 1179 5 for his patron

8. Ibid P. 268-

" सुवामयोऽपि खयरोगशान्यै नामध्यमुक्तापनकच्छनेन । अनङ्गर्सवीवनदृष्टशक्ति मुखामृतं ते पिनतीव चन्द्रः॥ ७॥ " — वैद्यनायस्य

Other verses ascribed to Vaidyanātha Paudilm ars: -Page #11 -- Under सुद्धा-योग्क-चापक:

" कुन्दे कुष्ठय कीतुकं त्यज वर्षि न्यम्रोधरोपमहे मा यत्ने करवीररोहणविधी कार्पोस्त्रवर्थीचिते । भातः कामनपाल चेपकतदः कुत्राप्यसी मृग्यतां यस्यामोदवद्यात् स्मरविधतमा माद्यन्ति चैत्रविधयाः ॥ २८ ॥ "
— वैद्यनायपण्डितस्य

Page 103 - Under 81: पदितिः

" सौवर्णः कमलाकरद्याशिशिलास्सोपानवद्धकमाः वारि श्वीरसहोदरं तटत्वक्षणीसुखाः श्वोणयः । सर्व त द्वीवरं सरोवरपरं निन्दाः कुतोऽयं विधिः करम्राहमयान्ययान्ति विमुखाः पान्या निदावेऽस्यमी ॥ ६ ॥ " — वैदानायपण्डितस्य ।

4 Keith: His. of San. Literature, p. 222.

(consinued on the next page)

Vide p. 286 of Krishnamachariar's H. C. S. Literature, Vide also p. 222 of Keith: Hisof Sanskrit Literature 1928. This authology is arranged in 163 sections and contains 4689
stansas including some by the auti or himself.

^{2.} and by E. Krishnams charya, G. O. Serice, No. LXXXII, 1988.

^{5.} Vide p. 19 of intro. to the Süktisunktheali (G. O. F. Barola, 1938). The following versus appearing at the end of this anthology (p. 468) give us the date of the work and some information about the author and his environment;—

Jalha or Jalhana, whose genealogy and family history are recorded in the first 41 verses of the Süktimuktavali, 1

> " बाकेऽकादांश्वरपरिमिते वत्तरे पिक्रलास्ये । चैत्रे मासे प्रतिपदि तिथी वासर सप्तस्तः। पृथ्वी शासत्यत्रसमहसा यादवे कृष्णराजे बहस्यार्थे व्यरचि भिषवा मानुना संयमिष्टा ॥ १॥ वाश्वाकुष्णमहीपसंपद्दधेवृद्धी निवाकारकः का िया] अभोजविकासतिगमिकरणश्चाणक्यचातुर्यवान् । स्फूर्वचर्द्रस्यक्रवंशमतिः साक्षाद्भतालंकृति-प्राग्मारो भिष्रजो वरो विजयते श्रीमास्कराख्यः सधीः ॥ २॥ हरीशयोखयख्डिशन्यद्वती-।मिदं शतम्। श्रीमता मगदत्तेन बहरूकेन व्यरच्यत ॥ श्रीकण्डीस्वराजस्य धर्मविचिम्ममस्त्रिणः। स्किमुक्तावळी सेवं क्योंत्रस्याणसंततिम् ॥ "

The particulars regarding the date of the work as furnished by verss No. I above are Saks 1179, of the name Pingala, month of Caitra, Pratipada tithi, Saptasapti nasara (i. e. Bavi vasara). These details give us the exact date of the work viz. Sunday, 18th March 1257 (Vide Indian Ephemeris, Vol. IV, p. 116), King Kraim referred to in verse 2 is identical with Kramadera of Davagiri, Mr. K. A. Padhyo (Life of Hemadri in Marathi, 1931, page 119) states that Krymadeva was contemporary of Cakradhara, the founder of the Mahambhava Sect. Mr. Padhye quotes an extract from the Mahanubhava literature in which a meeting of Kranadeva and his brother Mahadevarao with Cakradhara syami took place in Saka 1178 (= A. D. 1256) at Lopar (Dist. Buidhans in Berar), Mr. Padhye records the following inscriptions of Kranadeva's time :-

(1) 4. D. 1249-Minister Mallifeti gives a grant to Brahmins on 26-6-1249 (Copperplate) in Canarese (language).

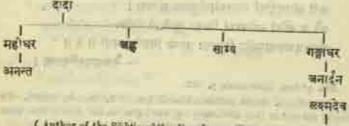
(2) A. D. 1849 - Mallifeti gives a grant on 22-7-1249 (Copper-plate)

8) A. D. 1250- Stone inscription at Kolhapur.

(4) d. D. 1265 - Copper-plate grant in Sanskrit by Caundarsia, son of minister Bicanna.

(5) 4. D. 1262 - Copper-plate grant of some lands by Mallifett. (6) 4. D. 1859 - Copper-plate ; rant in Canarese language.

1. Jalhana is stated to have been an officer in charge of the Elephants (Karicabiertpali or Karivendonatha) of Kranideva's army. Jalhans's genealogy (verse off) is given as follows: -



(Author of the Suldimultaveli and an officer in charge way of Elephants of Eransdevs, A. D. 1847-1960)

It is clear from the above identification in the Süktimuktävali of Vaidyanäha's stanza referred to above that the nose-ornament or nāsā-gra-muktāphala was an established feature in a. b. 1257, the date of this anthology. This conclusion is further supported by three more verses 1 in this very anthology referring to the nose-ornament, one of which is ascribed to Ksemendra but the authorship is not supported by all Mss, while another is ascribed to Bhānupaṇdita, who is identical with Vaidyabhānu, 2 the real author of the Sūktīmuktāvali. All these four references clearly prove that the nose-ornament consisting of possibly a ring with a pearl (nāsāgramauktīka) had become an established feature of the decorations of Hindu women about 1250 a. D. as it is referred to in the Sūktīmuktāvali composed in a. d. 1257 as we have seen above.

The foregoing references to the nose-ornament get independent corroboration from the Mahanubhava literature. Lilacaritra, one of the oldest works of the sect of the Mahanubhavas which deals with the incidents of the life of Cakradhara the founder of this sect mentions the nose-ornament in the following extract 3 which specifies the dress and ornaments of the goddess Mhalsa (= Mahalasa):—

1. Page 179 (of the Suktimuktheali) :-

" पुण्डरीकमिवाभाति नासावंशगमीक्तिकम् । कुचिहासनस्थस्य स्मरमूपस्य सुभुवः ॥ १४ ॥ "

- क्षेमेन्द्रस्य (ग. पुस्तके अयं ।निदशः)

Page 180—
" ळळाटे लोळाक्यास्तिळकमियचारी विधुरयं
स्वमापूर्णं वाञ्छक्रवरसुचया देवहितकृत् ।
अतो नासामेऽसी तदुपहतये मीकिकमियात्
स्पृटं दैत्यामालोऽधरशशम्त्रोरन्तरगतः ॥ १६॥ "

Page 181—
" तस्या बदनचन्द्रस्य कान्तिरन्यैव जायते।
कलक्कृतुलनां घत्ते यस नासाममौक्तिकम् ॥ २७ ॥ "

- मानुपण्डितस्य

Ibid, Intro., p. 61. Verses mentioned as of "Vaidyabhānupandita" are found on pp. 208, 577, 118, 840, 188, 229, 71, 5, 158, 300, 343, 85, 747, 5, 462, 155, 448, 376, 278, 232, 403, 183, 455, 399, 68, 213, 5, 206, 219, 107, 226, 468, 85, 5, 178.

8. This reference to nose-ernament has been pointed out by my friend Mr. H. N. Nene of Nagyur, the editor of many old Mahanubhiva texts (Vide B. I. S. Mandel Quarterly, Poons, October 1988, p. 55). I translate Mr. Nene's remarks regarding the nose-ornament:— "The names of the different ornaments and the rearl on the ness of the goddess should be noted for consideration. We must decide on therough investigation if women of the time of the Yadava Kings of Devagiri used to wear scafer or only one pearl." About the Mahanubhivas and their literature vide pp. 247-8 of Farquhar's Outline of the Religious Literature of India, Oxford, 1920 and pp. 725-779 of the History of Marathi Literature by L. R. Pangarkar, Poons, 1933.

" क्रोंकर्णे: कळाविया सोनयांची तानवर्षे भेवरिया आंगुः टीळा नार्की मोती " (LUA 172 of Lilacaritra)

The expression " नार्डी बोर्डी" meaning a pearl on the nose corresponds exactly to the Sanskrit phrase " नाराव्यक्षण " and as both these expressions belong to the 13th century it would be reasonable to conclude that the nose - ornament had not only captured the noses of Indian women of the 13th century but that it had entered the sacred precincts of the goddess Mhalsa as well, thus suggesting a greater autiquity for it than is proved by five different 13th century references recorded above.

Earlier testimony regarding the existence in India of the nose-ornament is recorded by Mr. N. N. Dasgupta ¹ from a work of the 11th century called the *Śāradātilaka* of Laksmana Dešika as follows:—

"As to Sanskrit literature, the Saradatilaka composed by Laksmana Dešika in course of delineating an Andhra woman represents her,
we are told (Pranasi, 1341 B. S. Karttika, pp. 109-110) as one with
whose breathings oscillates the pendant pearl of her nose-ring (nasanguri). Mr. Das Gupta further observes: — In Prof. Winternitz's History
of Indian Literature, Vol. I (Cal. Univ. 1927, p. 604) it (i. e. Saradatilaka) is placed in the 11th century, and if so, it alone is enough to invalidate the theory that nose-ornament was imported in or about the 16th
century."

I have not examined the passage in the Sāradātilaka which refers to the nose-ornament according to the writer of an article in the Pravāsī referred to by Mr. Das Gupta as this article is not available to me but

^{1.} My friend Prof. N. B. Roy of Mymensing has kindly drawn my attention to Mr. Dos Gupta's article on "Nose-Ornaments in India" - Calcutta Review. May 1937, pp. 143-144. Chave to thank Prof. Roy for this reference. The following points from Mr. Day Gupta's artiole may be noted here: - (1) Refutation of Mr. N. B. Divatia's view that the non-ermanent is a Muslim importation. (2) Refutation of the article in Process (Vol. XXVII, Pt. I, pp. acc, 716-18) in which an attempt is made on protorial evidence (not autorior to the 6th century) to prove that the nose-organism is a non-Hindu institution. (5) Reference to noseornament by the suther of the Saradatilaks of the 11th contury refutes the theory that the ornament was imported by the Muhammedans in or about the 16th century. (4) Reference to some pears in Valdyanathu's reze." Sudhamayops etc. " (v. 8885) found in the Sartigadhavapaddhadi of A. D. 1968. () Reference to some pearl in Vallahbudaya's Subka itapals which belongs to " in or before 1959 A. D." according to Dr. De and the "fifteenth contury " according to Poternon and Kuith. (6) Raka's verse quoted by Vallabladova referring to nose pour intushave been an interpolation as Baka thursahed 1417 A. D. (7) No. 27 of Vallabhadeva's Sub-LA disease containing a seference to some pearl is found in the Erepakarnisaria of Bilvamangala swigned to 9th century A. D. (IHQ, VII, 1951, pp. 334-42). (8) References to nonernament in Brahmovaicortopuring and the suggestion wrongly made that the latest recenalou of this purant took place in the 16th century (Bharafacarea (1937 B S, p. 36). Condusion :- " now-ornament was known in the Hindu period of Indian history."

in view of the evidence recorded in this paper the antiquity of the noseornament is pushed back on authentic grounds upto a. D. 1200 or so and there is every possibility of its existence in India about 1000 a. D. if not earlier, 1

Mr. Das Gupta states that verse No. 27 of Vallabhadeva's Subhāsitāvali which contains a reference to nose-ornament ("आएके अपनेतिक") is found in the Kṛṣṇa-karṇāmṛta of Bilvamangala alias Līlīšuka who is assigned to the 9th century A. D. Even if Bilvamangala belonged to a period one or two or three centuries later, Mr. Das Gupta observes, the evidence of the above verse and also of those noted by him places it above all doubt that the nose-ornament was known in the Hindu period of Indian history.

The Hindu period of Indian history normally ends with the end of the 10th century when the first raid into Indian territory was made by Sabuktigin. If Bilvamangala belongs to the 9th century the reference to the nose-ornament in the Kranakarnameta of Bilvamangala as pointed out by Mr. Das Gupta surely supports his statement that this ornament was known in the Hindu period and consequently the theory of Muslim importation gets weakened. Let us, however, examine the genuineness of the verse of Bilvamangala on which Mr. Das Gupta takes his stand and which reads as follows:—

" कस्तुतितलकं छछाटफलकं वक्षःस्थलं कीस्तुभं माधाये नवसीक्तिकं करतले वेणुं करे कक्षणम् । सर्वाष्ट्रे इश्चिन्दनं सुविमल कण्डे च सुकावली विक्रान्द्रोपरिवेष्टिती विजयते सोपालचढार्माणः ॥ "

This verse is No. 27 in Vallabhadeva's Subhāşitāvali edited by Peterson, Dr. S. K. De has recently published a critical edition of the

^{1.} Vincent Smith (Oxford History of India, 1928, p. 190) observes that the Hindu States enjoyed exemption from foreign invarious until almost the end of the 10th century. They were not exclusive affected by the 1state compact of Sind at the beginning of the 8th century or by the later Muslim occupation of Kabul. The first raid into Indian territory was made by Sabuhtigin, the Amir of Ghami in A. D. 1850-7 (A. H. 876). I have at present no references with me to the nose-ornament in India earlier than 1000 A. D.; mither have I any references to it from Persian or Arabic sources earlier than 1000 A. D. which may throw more light on the question of the genesis of the nose-ornament. It is for Arabic and Persian scholars to prove the antiquity of the nose-ornament prior to A. D. 1000 on the strength of references to it in Arabic or Persian literature of the early period (prior to the Arab conquest of Sind at the beginning of the 8th century). If the Arabic origin of the nose-ornament is proved it may enable us to postulate in a strenger manner the theory of foreign importation that now holds the field owing to the absence of references to the nose-ornament in the Rindu literature, architecture, painting etc., prior to the end of the 10th century.

Kṛṣṇakarṇāmṛta. 1 In the constituted text of the poem, (Bengal recension) the above verse is not found. It appears, however, in the additional verses given in the 2nd and 3rd Āśvāsas of Pāpayallaya Sūri's text of the Kṛṣṇakarṇāmṛta (South Indian Version). This version also contains an additional reference to nose-pearl (p. 317) in the following verse:—

" मौली माय्रवर्षं स्गमद्तिलकं चारुलालाटपट्टे कर्णट्टन्द्रे च तालीदलमतिसृदुलं मीक्तिकं नासिकायाम् । हारोमन्दारमाला परिमलमरिते कौस्तुभस्योपकण्ठे पाणी वेणुक्ष यस्य ब्रज्जयुवतिसुतः पातु पीन्ताम्बरो नः॥ ९३ ॥ "

The Bengal tradition originating from the time of Caitanya (1486-1533 a. D.) knows nothing about the two Airāsas of Pāpayallaya Sūri's text in which the above quoted two verses are found. Pāpayallaya Sūri who refers to Mallinātha (14th century) may have lived considerably after that date. Caitanya who brought the Krsnakarnāmṛta from Southern and Western India brought back to Bengal the tradition only of one Sataka of the text and hence Dr. De raises "legitimate doubt regarding the genuineness of the 2nd and 3rd Satakas of the poem included in Pāpayallaya Sūri's southern version of the text." 2

In view of the doubtful character about the chronology of the two verses quoted above it is difficult for us to regard them as conclusive proof of the existence of the nose-ornament in the Hindu period of Indian history. I hope, therefore, that Mr. Das Gupta will give us an incontrovertible proof in support of his contention that the "nose-ornament was known in India in the Hindu period of Indian history." Though personally, I have an open mind on the question of the Muslim importation of the nose-ornament the uniform absence of authentic references to noseornament in literature prior to the end of the 10th century as also the non-representation of this ornament in early sculpture and painting contrasted with the numerous references to it after 1000 a, D, as proved by the present paper has a cumulative force for compelling us to nod our head with the advocates of the theory of foreign importation of the noseornament, leaving aside the questions of the exact time when it was imported into India and the exact source from which the importation has taken place.

Daoca University Oriental Publications Series No. 5 — Examinar phenyla with commentaries of Gopálabharta, Caltanyadása, and Examadása Eavirája, 1988, p. 319.

^{2.} Krepakarphmyta, lutro., p. xiii.

I have recorded above the reference to the nose-ornament (referred to by Mr. N. N. Das Gupta in his article in the Calcutta Review May 1937) in the Śāradātilaka of the 11th century. As, however, I have not been able to identify this reference I have to record here another reference to the nose-pearl found by me in a work of the 11th century. This work is no other than the Vikramātikadevacarīta i or the life of king Vikramātitya, Tribhuvanamalla of Kalyāṇa, composed by Vidyāpati Bilhaṇa in the "Eighth decade of the eleventh century" according to Dr. Bühler. This poem gives us a fine description of the Svayamvara of the Sliāhāra princess Candralekhā or Candaladevi at Karahāṭa or Karhāḍa. Bilhaṇa gives us a minute inventory of the charms of the princess in chapter VIII of the poem. The following verse contains a reference to the nose-pearl nāsāvaṃśa-muktāphalā:—

" नासावंशविनिर्भुक्तमुक्ताफलसनाभिना । भाति भालतलस्थेन बाह्यचन्द्रनविन्दुना ॥ ७९ ॥ "

The expression " नासावंशवितिश्वेतसुकाष्ट " reminds us of the following verses in Jalhana's Süktimuktüvali of a. p. 1257 quoted by me already:—
" पुण्डरीकिनवासाति नासावंशनसीतिकम् । "

It is, therefore, clear that about 1080 A. D. when Bilhana composed his poem the nose-pearl had taken possession of Hindu ladies and was sitting tight on the rings in their noses as we must presume a nose-ring for a nose-pearl to wear on.

A further interesting reference to the nose-ornament or "Nasavibhūşa" is found in a work ascribed to Śamkarācārya and included in the Works of Śamkarācārya. The verse in which this reference occurs forms part of the Tripurasundarīmānasapūjāstotra and reads as follows:—

^{1.} Ed. by G. Buhler Bombay, 1875.

^{2.} Inif. Intro p. 20 - Bilhana mentions two Kings of Kashmir, Ananta and Kalafa. "Ananta's succession to the throne falls in the beginning of the year 1028 A. D. and his death in 1080. Kalafa's rule lasted from A. D. 1080 to 1088 while his coronation and the nominal beginning of his reign fall in 1062. "As Bilhana mentions Ananta as "Asit" Bühler concludes that he was dead when the poem was composed.

Vibramaditys VI, the Calukya King of Kalyana ruled from A. D. 1076-1197. The cate of the Vibramankadeva-Carifa appears to fall before A. D. 1088 because the work passes in silence the great expedition of the King to the South which then took place. Bilham also mensilence the great expedition of the King to the South which then took place. Bilham also mensilence the great expedition of the King to the South which then took place. Bilham also mensilence the great expedition of the King to the South Kalhama (VII, 986-8) that Bilham lived to hear of Harsadeva's accession (Keith: His. of Sons. Lif., p. 158).

Ed. by Sri Vani Vilasa Press, Srirangam, Vol. I of the Memorial Edition of the works
of Sri Samkaraoasya, p. 197. I am thankul to Dr. S. R. Belvalkar for drawing my attention to
this verse containing a reference to nose-ornament.

" मध्यस्थारुगरानकान्तिरुचिरां सुक्तासुगोद्धासितां दैवाद्वागंबजीवमध्यगरवेर्छंदमीमधः कुर्वतीस् । उग्सिकाधरविम्बकान्तिविसरैभौगीभवन्मौक्तिकां सद्त्तासुररोकुरुच गिरिजे नासाविभूपामिमास् ॥ ४५ ॥ "

The nose-ornament offered to the goddess in this verse appears to be an elaborate one. It consists of a red jewel in the centre surrounded by pearls. Dr. Belvalkar includes the Tripurasundaristotra among 210 stotras, the authorship of which is ascribed to Samkaracarya. It think the elaborate character of the nose-ornament referred to in the verse quoted above argues in favour of a late date for the above stotra and fully supports Dr. Belvalkar's remarks quoted above. If, however, any scholar can prove beyond challenge that the stotra in question is a genuine work of Samkaracarya we shall have to believe in the view of Mr. N. Das Gupta that the nose-ornament was current in the Hindu period of Indian history; but for the present the theory of foreign importation of this ornament appears to hold the field as I have observed already, whatever be the source from which it was imported into India and later spread throughout the length and breadth of the Indian peninsula.

^{1.} The mass-cibhn's is described as beautiful on account of the red lustre of the jewel in the centre (negretal original field) and resplendent with the light of pearls (negretal field) which encounted the jewel in the centre. I am unable to say exactly what is meant by the word not negretal to be a Sauskrit word. In the Canarces language a new-creatment is called 'High of 'where High means 'new' but it is difficult to connect high with not 'high in 'high in' Perhaps high may mean a studyor a grain (Marath) not Sanskrit high but this interpretation of the word needs some authority in its support. Whatever be the interpretation of the word needs come authority in its support. Whatever be the interpretation of the word needs come authority in its support. Whatever be the interpretation of the word needs come authority in its support. Whatever be the interpretation of the word needs come authority in the support. Whatever be the interpretation of the word needs come pearls. In the early refurences to the non-ormament coorded in this paper we have only a pearl but no jewel or raises.

^{2.} Basu Mallis Lectures, Part I. Poons, 1929, p. 223.

S. Is would be a useful study to collect and record with illustrations the different varieties of the non-ornament now current in India and compare them with the non-ornaments current in outside countries. Though such a study would be highly beneficial to the cultural history of Hindu India it would inveive considerable expense and trouble in procuring reliable information the next page.)

The Amarakośa of Amarasimha, one of the earliest Sanskrit lexicons composed before 8th century a.D. gives us a list of ornaments in the manusyavarga. This list includes such ornaments as mukuta kirita, cūdāmaņi, tarala, patrapāśyā, karņika, kuṇḍala, lambana, Uraḥsūtrikā hūra etc., but this list makes no mention of any nose-ornament. This omission is quite significant and we may be justified in presuming that the nose-ornament was not current in the time of Amarasimha.

Before concluding this paper I shall show in a tabular statement the antiquity of the nose-ornament from A.D. 1000 onwards as proved in the foregoing paragraphs:—

No.	Date of Reference	Source of Reference	Manner of Reference
1	about	Bilhaga	" नासावंशवितिमुंकमुक्तापकं"
2	A. D. 1080 Eleventh	Lakşmana Desika	** Nās-āṅgurī **
3	century A. D. 1257	Jalhana or Bhanu-	¹¹ नासार्थकानमीकिक ¹⁵ or नासाध्योक्तिक ³⁷
4	about	Lilacaritra	'' नाकीं मोतीं ''
5 6 7	A. D. 1250 A. D. 1363 15th Century 15th Century	Śārāgadharapaddhati Vallabhadeva Pāpayallaya Sūri's	" नासाप्रमुक्ताफ्ड " " नासाप्रे नवमीक्तिकं " " भौक्तिकं नासिकायाम् "
8	14th Century	text of Kranakarnā mṛta Mural Paintings at Tiruvāmbadi shrine, Trivandrum	Picture of a music party of women, wearing nose-rings with pearls

tion with pertinent illustrations. I shall, however, record here some information sent to me from Assum by my friend Dr. B. Kakati of Gauhati. The mass-ornaments, worn at present by Assumese women are (1) Nak phul (mose-flower), (2) Nak Chedà (ness-moon) and Nalak or Nalakk (ness-lotus). All of these ornaments are made of gold. Nak phul is made of fine gold wire, twisted and interwoven and looks like a small lotus bud. With the book it is fastened into the hole of the nose bored through. Nak Candà is made of fine gold wires and similarly put on. Nalak has a ring and a pendant and is put on like a small. As Assumess literature does not go beyond the 15th century no literary references are available—so states Dr. Kakati in his latter of \$125 October 1938. It is currious that no pearl is found on these Assumess

nose-ornaments.

9	16th Century	Mural Paintings in the	Figures of women wear
	The state of the s	Old Palace in the	ing nath are represen-
10	10 S 2000	Travancore State	ted in the paintings.
10	A. D. 1588	B, O. R. Institute	Picture of goddess Sara-
	THE BALL	Ms	svati wearing a nose-
11	A. D. 1611	DLA	ring with pearls.
-		Bhāgavatapurāņa Ms at Jodhpur	Pictures of Indies wear-
	-	ar sodapur	ing nose-rings with 3
12	A.D. 1616-19	Edward Terry's	Terry refers to nostrils
0.0		Travels in India	pierced and nose-rings
70	7 -		worn by ladies
13	A. D. 1678	Jayarama Kavi	"नासामुकाफल" worn by
			the goddess Bhavani on
14	c. A. D. 1750	0	the Pratapagad fort
1000	C. Zi. 17. 1100	Samgraha-cūdāmaņi	Musical ragus called as
	Annual Control		" नासिकाभूषणी " and " नासामणि "
15	c. A. D. 1750	Hamsavilàsa of	
William III	INTO SERVICE PROPERTY AND ADDRESS OF THE PARTY	Hamsamitthū	" नासाभूषा " with मीकिक -
	T- T	- Additional of the	युगल and अहणस्त
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P. S.— Since this article was composed the following additional information about the nose-ornament has been received:—

(1) Dr. B. Kakati writes under date 14-12-1938— "Regarding your query about Assamese nose-ornaments as represented in painting and sculpture, a competent Assamese scholar informs me that there is no nose-ornament traceable in existing painting and sculpture. I informed you already there is no reference to it in existing literature which dates from the 16th century. This would perhaps lend weight to your theory that nose-ornaments were introduced by the Moslems. Assam was never a Moslem province."

(2) Mr. G. N. Shrigondekar of the Bhandarkar Institute has kindly drawn my attention to the following verse quoted anonymously by the late Mr. Visnushastri Chiplunkar in his Nibandhamālā (Vide p. 51 of the collection of the Subhāṣitas in the Nibandhamālā, published by Chitrashala Press, Poona, 1926).

" इन्दीवराह्याः स्कुटविद्वमीष्ठयाः सङ्केतसुद्दिश्य वने चरन्याः । चौराः समस्तामरणानि इत्वा नासामणि नापहरन्ति चित्रम् ॥ १५७ ॥ "

The above verse occurs in the Subhāṣitaratna-bhāṇḍāgāra (N. S. Press, 1886) p. 314, verse 84, but here also the name of the author is not recorded.

(3) I am thankful to Rao Bahadur K. V. Rangaswami Aiyangar, M. A. for the following remarks dated 22-12-1938 on the nose-ornaments in South India:— "Three nose-ornaments are in use in South India. One is a screw inserted on the side of the nostril in a hole bored for the purpose. Its name is Mookku-Kutty, i. e. nose-peg. Ladies wear it on both sides of the nose and usually there is a precious stone embedded in the centre of the screw. It is obligatory for married women and virgins to wear at least one of these. Bulak and Nattu are two ornaments, not now in fashion. As their names denote, they were borrowed from North India.

Very curiously in lithic figures in temples these ornaments are not traceable, probably because of the difficulty of representing them in stone. But I have noticed the screw, in mural paintings in Travancore, I am disposed to regard its wearing as a fairly old custom.

(4) Anantabhatta, author of Campübhārata is reported to have "lived about 1500 A. D." His sister's son was Somanātha, the author of Vyāsayogicaritacampū. Somanātha was contemporary of king Acyutadevarāya of Vijayanagar and must have lived about 1535 A. D. (Vide p. 285 of M. Krishnamachariar's History of Classical Sans. Lit. 1938 and B. Venkobarao's Edition of the Vyāsayogicaritacampū (Bangalore) Introduction, pp. iv-ix.) Acyutadevarāya ruled from A. D. 1486-1542.

Anantabhatta in verse 89 of 2nd Stabaka of his Campübharata (Page 80 of N. S. Press, Edition, 1903) puts a nose-ornament on the nose of Draupadi and describes its beauty as follows:—

" स्विनासिकाशिखरमाकितं नवमौक्तिकं मरपतेर्वुहितुः । श्रुग्रुभे मुलाम्बुहहमध्यचरस्मितहंसिकाजनितमण्डमिव ॥ ८९ ॥ "

The pearl on the tip of Draupadi's nose looked as if it were an egg laid in the lotus of her face by the female swan viz. the smile on her face.

Anantabhatia hardly dreamt of the anachronism involved in the reference!

(5) Prof. R. D. Laddu of the S. P. College, Poons, has kindly drawn my attention to the following reference to nose-ornament (সম্প্রা) occurring on p. 191 of *Dhola-Marūrā Dūhā* edited by Ram Singh and others and published by the Nagari Pracharini Sabha, Benares, 1935:—

Daha Nos. 571, 572 read as follows-

" सुंदरी चोरे संप्रही, सब कीया सिणगार ।" नक-फुली कीथी नहीं, कहि सन्ति कवण विचार ॥ ५७१ ॥ "

Compare the above Daha with the anonymous verse quoted above which reads:—

" इन्दीवराइयाः स्फुटविद्युमीष्टयाः सङ्केतसुद्दिश्य वने चरन्याः । चौराः समस्वाभरणानि हत्वा नासामणि नापहरन्ति चित्रस् ॥ "] " अहर-रंग रच्छ हुवइ, सुख कावळ मसि अस । काँक्यउ गुंबाहळ अछइ, तेण न वृक्ष्ठ सख ॥ ५७२ ॥ "

According to the Editors the D. M. Düha was composed between Samuat 1000 and 1618. i. e. between a. d. 944 and 1562. It may be earlier than Samuat 1450 i. e. a. d. 1894 (Vide Prastavana of the work, p. 10). The upper limit of a. d. 944 fixed by the Editors is the date of the hero of the poem viz. Dhotā. There is no evidence to prove that the work is contemporary. This reference to nose-ornament can be easily assigned to the period, 1000 a. d. d. to 1394 and hence it does not go against the theory of the foreign importation of the nose-ornament after the advent of the Mubammedans.

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13. Two Religious Poems (in Marathi and Sanskrit) on the Hindu Nose-ornaments*

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In my studies 1 of the Nose-ornament of the Hindus so far published I have tried to establish the following points:—

- The nose-ornament called nath could not be traced in any historical source earlier than A. D. 1000.
- (2) This nose-ornament is possibly a foreign importation into Indian culture but its foreign source or genesis has not to my knowledge been brought to light on documentary evidence by any scholar.
- (3) This nose-ornament, though foreign to Indian culture, has now become sacrosanct to such an extent that it forms part of the costume of gods and goddesses in Hindu pantheon.

In view of these conclusions already suggested by me I was in search of some texts dealing with the Nose-ornament but having a religious import. It has already been proved that the use of the nose-ornament by our women-folk has been getting more and more popular during the last 1000 years though latterly owing to modern education its use has slackened a little in certain provinces. I have found two poems in which the nose ornament is the central theme though it is used for religious instruction in a poetic way. One of these poems is a song in Marathi by a Deceani saint of the early 17th century while the other poem consists of 25 Sanskrit stangas on the nose-ornament of a goddess by a possibly South Indian writer, who was obviously a devotee of this goddess. I am unable to fix the chronology of this Sanskrit poem, though its author gives some particulars about himself and his ancestors. These poems show in an admirable manner the importance that came to be attached to this late importation into Indian-female costume and the perfect innocence of the writers regarding its foreign origin.

The Marathi poem on the nose-ornament is a pada or song by Keśavasyami who was living in Śaka 1550 = A. D. 1628 according to Mr.

Indian Historical Quarterly Vol. XXVII. pp. 506-511.

^{1.} These studies arm:—(1) Antiquity of the Hindu Nose-ornament called Nath, Annals (B. Q. R. Institute) XIX, pp., 313-334 and (I) References to Nose-ornament in some works ascribed to Samkarācārya etc.—B. I. S. Masidal Quarterly, Pooms, 1940, Vol. XXI, pp. 1-9.

Vaman Daji Oka 1, who has edited Keśavasvāmi's Padas numbering no less than 478. Mr. Oka records the following pada on page 266 of his edition of Keśavasvāmi's songs:—

" साझें नाकीचे वरवें मोती वो ! ।

वरी फांक्ती निर्मेळ उथोती वो ! ॥ भूवपद ॥

छद सुवर्ण गुंफुनी सिल्छा ।

सुचीं सुखाचा दावीत सोहळा ॥ माझें० ॥ ३ ॥

परम सुंदर वें बतिदाळाचें ॥

तिस्य न्तन परी बहुकाळाचें ॥ माझें० ॥ २ ॥

वोध माणीक लावरी शोभतें ।

उंची पावुनी खाळतें लेंबतें ॥ माझें० ॥ ३ ॥

सुक्वलेणियामावी केंजें वो ॥ माझें० ॥ ३ ॥

गुरुवल्लम मोहिला बेंजें वो ॥ माझें० ॥ ४ ॥

प्राप्ती उदवीं केशव केतसे ॥

वरी सदगुर चुंवन देतसे ॥ माझें० ॥ ५ ॥ "

In this pada the poet has used the metaphor of the nose-ornament for bringing home to the readers the beauties of spiritual instruction and understanding acquired by a devotee through sincere devotion to his preceptor. Here the nose-ornament consists of a pearl (moti) and a ruby (mānk) set in pure gold. It is described as one of the chief ornaments of a lady. The close spiritual intimacy between a devotee and his purn is here depicted as that existing between a husband and his beloved wife. The poet has sustained the metaphor of the nose-ornament throughout the song. As a lady adorned with fine ornaments appearing before her loving husband is sure to receive his kiss, even so a loving devotee who has been adorned with spiritual understanding through his guru becomes capable of receiving spiritual favours from this guru, given but the complete self-abandonment of the devotee towards his guru. This appears to be the substance of the above song.

Whether other Indian vernacular literature contains any poem on the nose-ornament I cannot say, but I record below a Sanskrit poem which is entirely devoted to the nose-pearl or nasamauktika of the goddess Godd.

^{1.} Vide pp. 143-200 of Karmanngraha 18, A collection of Markith Padas by marious Markith Posts, Part I by V. D. Oka. N. S. Prem, Bombay, 1891. Mr. Oka states that Kasara was a Saint who halled from Bhagangar (— Hyderahad, Deccan). His gure's name was Kasiraja Semes. He is the author of Ekadait Carifro in Out metre and several other pands and abhangan. He was living in Saks 1800, it is not known when he died. His Samadhi is at Gulburga. The Marathi poet Moropant refers to him in his work Sammaninalia.

Towards the end of the poem the poet gives us some information about himself. He calls himself "क्षीबेड्डरेश कवि", son of "क्षीबामानुबद्दिक" and grandson of "क्षेपादिविद्दन्मिण". The title of the poem is " नासामीकिङ पंचित्रिति." In the Colophon the name of the author is given as "क्षीबेड्डर-विवासदास," son of "रामानुबन्दर" and grandson of "क्षेपाचळाचार्य," an ornament of the "आहेष गोत्र." These particulars may enable us to identify this author but this work must be left to the students of South Indian history.

The following text of the poem is based on the only manuscript available in the Govt. Oriental Manuscript Library, Madras. This Ms is R. No. 3872.

"।। गासामीकिकपञ्चार्वेशतिः॥

पचाह्यादकरस्य पावनकरामशांड्कासोन्मुखे नित्यं पट्पदगीतचारुविभवे सहमीनिवासस्थले । गोदाया बद्नाम्बुजे निवसतो हंसस्य छीछां श्रयन् नासामीतिकमातनोतु भवतां नानाविषां सम्पद्म् ॥ १ ॥ अध्याजादस्तप्रदे सुमनसां सन्मण्डलीसेविते प्रक्रेक्टपटलीरुचीविजुवनोचण्डोलस्मण्डले । मोदावक्त्रनिक्षाकरेऽनुकहते यहोहिणीविसमं नासामीकिकमातनीतु भवतां नानाविषां सम्पद्म् ॥ २॥ मुकार्कु सल्लान्तका सरस्यास्य निषये मुखता-ा । । इसाजाआलिपरीवृते स्वपटीलमध्ये मियत्तारके ! गोदावक्त्रनमस्थले कळवत शंका श्रमाकृकस्य य-बासामीकिकमातनीतु अवतां नानाविधां सम्पदम् ॥ ३ ॥ चक्षनीलसरोरुहे परिकसवस्त्रीवले रहियो देश्या दन्तविसाहरे सुदुहसवाओषलद्रीचिके । हंसाधिष्टितसब्दियी विससरी जातं सुलाख्ये इदे नासामीकिकमातनोतु भवतां नानाविषां सम्पदम् ॥ ४ ॥ सीमन्ताह्मयकान्तिपुरनिपताक्त्योपमाया भवे-क्षेत्रया रत्नळळन्तिकासुलसररसंप्रयन्ती रूचा । तस्याः फेनवितानसिव्यनुदिनं सन्तार्केतं योक्तिकैः नांसामीकिकमातनीतु भवतां नागविधां सम्पद्म् ॥ ५ ॥ सन्धानाचलमाकलस्य तिलकं रज्वा कटालास्थया ा प्रोता नाथे मन्द्रसास्तार्थमञ्जा बदादरं मध्नति ।

मातुर्वनत्रपयोनिधी विश्वतुरे यद्बुद्बुद्स्याकृतिं नासामीकिकमातनीतु भवतां नानाविधां सम्पद्म् ॥ ६ ॥ कान्त्या यनत्रनिशाकरेण विजितः पूर्णेन्दुरेत्य स्वयं लजासंकृषितात्मको विश्वतुते सेव्यां (वां) रहामन्यदम् ॥ इत्यं सञ्जनयन्मति हृदि सतां देक्या रमाधीकितु-नौसामीकिकमातनीतु भवतां नानाविधां सम्पद्म् ॥ ७॥

्रगोदायास्तिल्हास्यपत्रविततेर्ज्युग्मशासाञ्जयो आन्त्या किसलयाह्मत्रालवालान्तरे । गासाबीरुच बाद्चल्सुमनमङ्गल्लेन सम्जायतां नासामीकिकमातनोतु अवतां नानाविधां सम्यदस् ॥ ८ ॥

> देवनास्सुन्दरमन्द्रहासपयसि अकल्पवलीवृते रहेन्द्राननपूर्णचन्द्रविमलालोकाहिवृद्धिं गते । खेतद्वीपथियं मुखाभिधपयः पायोनिधावाद्धन् नासामौक्तिकमातनोतु भवतां नानाविधां सम्पदम् ॥ ९॥

गोदाया मुख्यक्कताविन्छयाजाता निजा भामिनी वाणी तिस्यितिवि खिद्यमनसा संप्रेक्षिता वेशसा । शंसन्ती वहुदीरितं वसित कि हंसीति शक्को स्वन् नासामीकिकमातनोतु भवतां नानाविषां सम्पदम् ॥ १०॥ कान्त्याऽभोदयचोमरन्दमहसा देग्या सुगाम्भोदहाः पाथोजं विजितं सितं प्रतिदिनं प्राप्तुं पुनस्ताम्गुणान् । तेनासिकसुपैति निज्ञछतरामित्यादयक्षो धियं नासामाकिकमातनोतु भवतां नानाविषां सम्पदम् ॥ ११॥ स्वीयाभागरकीसुदीपरिमिछद्वन्ताम्बुगाताम्बराव् सीमन्ताभिषसंष्यया सद्द कवण्यान्तं पराकृषेतः । भासस्वादस्तोद्धेकद्यत्ववन्दस्य सोभा भजन् नासामीकिकमातनोतु भवतां नानाविषां सम्पदम् ॥ १२॥ नासामीकिकमातनोतु भवतां नानाविषां सम्पदम् ॥ १२॥

नासावंशकतोदरान्तरभवे मुकाफकानां गये चत्व्वं... सुविभवं वभूव तरसा नीरन्ध्रतानिगंतम् । तद्ववद्राव्यस्टंडरोति सततं देव्यः इति व्याद्वं नासामीकिकमातनोतु भवतां नानाविधां सम्बद्म् ॥ १३ ॥

] जात्रभारतकाटचन्द्रसङ्के भासाप्रणावयन्तरा सन्दं सन्द्रसयो गत्कवायसुधाविन्दुर्गिरुद्धोऽभवत् । देश्या बोष्टवटादितीय सतिसत्संदोहसंबेहदं नासासीत्तिकपावमोत् सवतां नानाविधां सम्पद्म् ॥ १४॥

मातुमेन्द्रइसच्छटाच्छळ्ळसरपाशान्वितस्य स्मरो नासारन्ध्रनिरूवमृतिरस्तरङ्कासानिले सौरमम्। तल्लोभेन मनोस्रगः किल हरेरायात इस्युद्धितं नासामीकिकमालगीतु भवतां नानाविधां संपदम् ॥ १५ ॥ / मासाकृत्र्लवाजुषो नु कवरी कालिन्दि कृष्णस्य किं कस्तरीतिलक्ष्यकस्य सुदशी भीमोस्करं सुक्यतः। तन्मार्गे गस्तिः कराद्ध इति प्राक्षेत्रीवितं नासामीकिकमातनोतु भवतां नानाविधां सम्पद्म् ॥ १६ ॥ गोदाया मुखपक्के निवसति श्रीरंहनाथेऽन्वहं साकाङ्क्षं तिलक्ष्य छेन पदयोस्सेवां विभोरायरन्। शेषः कण्डलितः किमित्यवष्टतं चीमत्समहेद्युमं नासामीकिश्मातनीतु भवतां नानाविधां सम्पद्म ॥ १७ ॥ कृष्णोऽस्यास्तिलकच्छलो सुखगृहे नासाव्यनिश्रेणिका-मारुबाञ्च उउन्तकामियङसग्रन्थसभाति यत्। पाणेस्तश्रवनीतमेव गळितं भावीति संभावितं नासामीकिकमातनोतु सबता नानाविधा सम्पदम् ॥ १८ ॥ गोदाया बदनं विश्वं कुबलयामोदस्य सन्तानकं मस्या लोकतिरस्ततापनिवहं श्रीविष्ण्यिसोञ्जवम् । अंकं तस्य समागतो नु बुध इत्यापाद(म)छेपनं नासामी कि समावनीत भवतां नामविधां सम्पद्म् ॥ १९ ॥ रक्षेत्रस्य मनो चु मृतिमय्तिवेमाज्ञितं पृत्यतो निर्गत्य प्रभुणेव बक्रनिकटं संप्राप्य संप्रेषितम् । अन्यद्वाचिमहास्त इस्पनुक्कं क्ल्प्तं कलावित्कृके-र्गासामीकिकमावनीतु भवतां नानाविधां सम्पद्म् ॥ २० ॥ देव्याइकारद्यन्द्रसण्डळळस्यायोख्यावितानोपमा या बक्जाम्बुरुहेऽस्वहं स्मितसुधा स्रोतस्विनी दश्यते । तस्यास्सञ्जनकः क्षमाभृदिद्मित्यृदावहं घीमतां नासामीकिक्सातनोतु भवतो नानाविधो सम्पद्म् ॥ २१ ॥ इन्दुमेन्द्द्वसं विशंक्य विमलं क्योत्सावितानं निजं देव्या वक्त्रसरोहहा हुतमिति प्राप्तस्तद्रन्वेपितुम्। आस्ते तक्षिकटे किलेति कविभिनिवर्णनाहाणितं नासामीकिकमातनोतु भवतां नानाविधां सम्पद्म् ॥ २२ ॥ सूर्यांनोकविकस्वरं सुरभिलं शीवांश्रुतेनोऽसहं देव्यास्तामरसं विचिन्त्य बद्नं वीक्षामरन्दीत्करम् ।

Studies in Indian Cultural History

वाणी बन्मिपतोऽत्र तिष्ठति सदेस्याखोचितं पण्डितै-नांसामीकिकमातनीतु भवतां नामाविधां सम्पद्रम् ॥ २३ ॥ देव्या श्राससमीरणोदि ... श्रमाऽमोदाशया पश्चगः क्षित्कण्डलिनइश्रशाहसरुचि ... निश्रलम् । एवं सा चिरमावितं सुमतिभिविद्विद्विरुचयार्भ नासामी किक्मावनीतु भवतां नानाविधां सम्पदम् ॥ २४ ॥ गोदावक्यपयःपयोनिश्वितटे नस्वा [नासा ?] भिधाश्चक्तिका कान्त्या सा सुभगैरतीय कवरीकाद्रम्बिनी पुजिते । मुक्तारत्नमसूत किं निवति मुद्दः प्रेक्षाबद्धेक्षितं नासामीकिकमातनोत् भवतां नानाविषां सम्पदम् ॥ २५ ॥ श्रीरामानुजदेशिकस्य तनयः श्रेषादिविद्यन्मणेः पौत्रो यामकृतेह मकिनिभृतः स्रीवेड्रेशः कविः। नासामीकिकपञ्चार्वेशविमिमां नित्यक्षपन् भानवी गोदापादसरोजयुग्मविषयां मर्कि भजेत्पावनीम् ॥

इति श्रीमदान्नेयगोत्रभूपायमाणशेषाच्छाचार्य-पौत्रेण

श्रीरामानुजगुरुवरस्तुना श्रीवेष्ट्टनिवासदासेन विरक्ति। श्रीगोदानासामीकिकपचविंशतिः स≠पूर्णा ।

मोदागुणस्त्रकोशे नासामीकिकविषयं श्लोकह्यम्।

नासामणीरोहिणीं से यती वदनचन्द्रमाः। सजस्यको ब्रूपक्षेत्र जहाति शठजिल्लाते ॥ मुखकान्तितरक्रियमा बहुन्त्या जीवनं सम । शक्के नामावटीसक्तं सैकतं नासिकामणिस् ॥

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14. References to Nose-ornament in some works ascribed to Samkaracarya and their effect on the Authorship and Chronology of these Works*

The Theosophical Publishing House, Adyar, published in 1937 an edition of the Saundaryalahari 1 of Śri-Śamkara-Bhagavatpāda. The Editors describe this work as a Poem, (i) "displaying the finest touches of poetical fancy, (ii) a Stotra, Hymn in praise of the Goddess Tripura Sundari, (iii) a series of Mantras, mystic formulæ, to be used by the Upāsaka along with the corresponding Yantras, Diagrams, wherein the Devi is to be conceived as abiding, and (iv) an exposition of the Agamas and Tantras bearing on the worship of the Supreme Being in its aspect of the Šakti, Creative Energy, known as the Śri-vidyā, embodying the underlying principles of Vaidika Dharma and as such having the sanction of the Vedas, "2 Further about the authorship and date of the work the Editors make the following remarks:—

(1) "Śrī-Śamkara-Bhagavatpāda is accredited as the author of the Saundaryalahari 3 by Liakṣmīdhara, Bhāskararāya, Kaivalyāśrama, Kāmeśvarasūri, Acyutānanda and a host of other commentators 4 of the work."

* B. L. S. Mandal Quarterly Vol. XXI, ph. 1-9.

 Edited with English Trans. Commentary, Diagrams and an Appendix on Prayoga by Pt. S. S. Sastri and T. R. Srinivasa Ayyangar.

4. Intro. p. V.

 Ibid p. ix—" Vallabhadeva, who is assigned to the fifteenth Century A. D. in his Subhasifavali quotes the 27th Etama of this work ascribing its authorabile to Sri Samkara—Bhagavatpada."

4. Vide Aufrecht: Cata Catalogorum. Part I. p. 48- Commentaries on आनंदलहरी or

सीन्द्रपंत्रहरी addressed to Sakti by Samkaršearya :-

(1) विद्र-मनोरमा, (2) विष्णुपक्षी, (3) by अप्पपदीक्षित, (4) by कविराज, (5) मञ्जुमापिणी by कुण्णावार्ष, (6) by केशवसह, (7) सीमान्यवर्षिती by केवस्याश्रम, (8) तत्त्व-दीपिका by शङ्गहरि, (9) by गङ्गाचर, (10) by गोपीराम, (11) आनन्दलहरीतरी by गौरी-कान्त सार्वभीम, (12) by जगदीश, (13) by जगलाथ पञ्चानन, (14) by नरसिंह, (15) मावायदीपिका by जग्रानंद, (16) by मल्लमह, (17) by महादेव विद्यावागीश, (18) by माधव वैद्य, (19) by समचंद्र, (20) by सममद, (21) by समानंदतीथ, (22) by लक्ष्मीयर देशिक, (23) by विश्वभर, (24) by श्रीकान्तमह, Part II p. 9--(25) by लक्ष्मीयर देशिक, (23) by विश्वभर, (24) by श्रीकान्तमह, Part II p. 9--(25) by

- (2) "The author of the gloss Sudhāvidyotini ascribes it to his own father Pravarasena, the son of Dramida, a king of the Dramida Country, and says that on the strength of the information directly obtained from his father he wrote the said gloss."
- (3) "There are others who say that Siva himself is the author of the Stotra.
- (4) And yet others who maintain that it had its origin in the teeth of Lalita, the Prime Sakti, "
- (5) "There is yet another tradition about the prime source of this work. The story goes that Samkara Bhagavatpāda, who is considered to be Iśvara incarnate, paid a visit to Kailāsa clad in the robes of a mendicant and took the Mantra-Sāstra placed by the Devī on the throne of Iśvara. While he was about to leave Kailāsa along with the spoil, Nandi-keśvara, who was on duty hard by, snatched the book from his hands. After grappling with him for a while the Acārya succeeded in retaining a portion of the book which contained the first 41 stanzas of the Saundarya-lahari to which were added 59 more stanzas composed later on by him to complete the work." The view of the Editors about the authorship of the work is clear in the following remarks 2:—

"All these traditions apart any unsophisticated student of the Srividyā after a thorough and close study of the literature bearing on it is bound to arrive at the conclusion that this work of Samkara gives a faithful rendering of the views of his Parama Guru Sri Gaudapādācārya in the first 41 stanzas of this work for the delectation of the more advanced student, rounded off with a highly poetic adoration of the Devi in the

[[] Concluded from last page]

शंकराचार्य, (26) विस्तार चन्द्रिका by ग्रोविंद, (27) by श्रीरक्षदास, Part III p. 11—(28) पदार्थचन्द्रिका, (29) रहस्यमकाश by खगदीश तकांत्रिकार (vide No. 12 above), (30) by पद्मनाम दच (31) सुधाविद्योतिनी by प्रवरतेन (१), (32) तत्त्ववोधिनी by महादेव, son of यादव (vide no. 17 above), (33) by सुकुटराय, son of समक्षि, (34) by समग्रहर शमन्, (35) मनोरमा by सहजानंदनाथ (See No. 1 above) and (36) हरिमक्षितुचोदय by इरिनारायण.

The chronology of all these Communicators is worth investigation in view of the importance of the text they have communical upon.

^{1.} Ibid, p. X.

^{2.} Ibid, p. X. footnote-last nine lines.

latter portion." The Editors have greater belief in "the genuineness of Samkara-Bhagavatpāda's authorship of this Stotra," "than of several other Stotras ascribed to him."

About the date of the author of the Saundaryalahari the Editors

"Samkara-bhagavatpāda to whom almost universally this work is attributed must have flourished in the eighth Century A. D., an inference which is supported by the view of European scholars that Śrī Samkarā-cārya, the author of the Śūrlraka-mīmāmsābhāṣya flourished between A. D. 788 and 820." "We are, therefore, of opinion that this Stotra is the genuine work of Śrī-Śamkara Bhagavatpūda, who lived in the eighth Century A. D." With the firm belief of the Editors in the authorship of the Saundaryalahari, which they regard as the genuine work of the celebrated Śamkarācārya, the pupil of Gandapādācārya, let us see if there exists in this poem itself any evidence which goes against this belief. 3 Verse 61 of this poem reads as follows:—

भ असी नासावंशस्तुहिनगिरिशंशस्त्रवापिट त्वदीयो नेदीयः फळतु फळमस्माकमुचितम् । बहुब्रस्तर्युक्ताः तिशिषतर्गिश्वसम्बद्धिताः समुद्ध्या यस्तानां व्यहिरपि च मुक्तामणिषरः ॥ ६१ ॥ "

The Editors translate this verse as follows : -

"O Flag of the Staff (dynasty) of the snow-clapped Mountain may this the bamboo of thy nose, immediately bear us the cherished fruit.

^{1.} Ibld, p. xi.

^{2.} Ibid, p. xii.

^{3.} J. N. Farquhar (p. 208 of Outline of Religious Literature of India, 1920) makes the following remarks about the Saundaryslahari :-

[&]quot;The Saundaryalahari is a famous ode to the goddem in a hundred stansas, of which Stansas I-41 are frequently published as a separate ode under the name Annedalahari. The whole is usually ascribed to Samharanarya but serious scholars regard the ascription a mistake, whole is usually ascribed to Samharanarya but serious scholars regard the ascription a mistake. Lakemidhara who belongs to the end of the 18th Century has a valuable Commentary on it. As he unbesitatingly accepts the authorship of Samhara there must be a tradition of some age to that effect behind him. The work thus goes back to a fairly early date but it is not yet possible to be more definite."

The date " end of the 18th Century " for Laksmidhara given by Fasquhar is wrong as Laksmithara was contemporary of Kranadevaraya of Vijayanagar (A. D. 1809-1880) and was taken the fit poet in the literary circle of this king (Vide p. 288 of Vijayanagar Sarth-Centenary Commemoration Volume, Dharwar, 1986.)

Bearing in its (hollow) interior pearls, kept in their places by thy very cool breath, it wears a pearl outside also, there being an abundance of them (pearls) therein." 1

The Editors tell 2 us: "Here is reference to the South Indian custom of boring a hole through the left side of the nose of women so as to attach an ornament with a pearl pendant."

The foregoing remarks of the Editors leave no doubt that they treat this verse, containing a reference to nose-ornament, as a genuine part of the Saundaryalahari which they say is a work of Sri Samkarācārya. I have now to invite their attention to my paper s on the Hindoo Nose-Ornament in which I have brought forward sufficient evidence to prove that the nose-ornament makes its appearance in Indian history and culture about 1000 A. D. but not earlier. If the above reference to nose-ornament in the Saundaryalahari is a genuine one it will prove the existence of nose-ornament in India in the 8th Century A. D., if not earlier — a conclusion which is not warranted by my evidence regarding the nose-ornament explained by me in detail in my paper under reference. On the contrary I am inclined to hold the views that —

" रत्नहारप्रभालोक्षन्पुरप्रकटाङ्गदम् । मुक्ताप्रकायम्काणि मालावलयमेत्वलाः ॥ ५७ ॥ कटकान्यूस्वालानि केयूराः कर्णमुद्रिकाः। कर्णदुरान् विलावन्वारमस्तकाभरणानि च ॥ ५८ ॥ कण्डिकावलयामानि रक्ताः पाद्वेष्टकाः ॥ आञ्चल्याकुञ्च्य सर्वाणि विश्वपूर्विदेशो दिशः॥ ५९ ॥ "

This is a description of ladies of the autohpura mourning the less of the prince Tarange and throwing away all their ornaments. I he list of woman's ornaments recorded here is quite slaborate and if it includes earrings (**Mqig****:) the omission of नासामुक्ता कर in this list is worth noting. According to Dr. Upathye "Japainphanandi belonged possibly to [Continued on next page]

^{1.} For the double meaning of the word Vamia and its application in the present stansame the remarks of the Editors on p. 192. "The fact that the Devi's nose wears as an ornament a pearl outside, is taken advantage of by the post, who represents it as one of the pearls in the bellow of the bamboo-like nose cast by the exhaling breath of the Devi and forming an index as at were to the pearls inside."

^{2.} Ibia, p. 193.

^{3.} Vide Annals of the Bhandarkar Institute, Vol. XIX pp, 513-332 "Antiquity of the Hist-du Nove-Ornament called Nath."

^{6.} I may point out the significant observe of some ornament in the following extract from a Jain Sanskrit work of "A. D. 7th Century": — Versus 57 to 59 of Chapter XV of Varanga Carita of Jatasimhanandi (ed. by Dr. A. N. Upadhye, 1988, p. 188) read as follows:—

(1) the verse in the Saundaryalahari referring to nose-ornament is not a genuine part of the poem.

or (2) if the Editors regard it as a genuine part of the poem the entire poem is not the work of Sri Samkaracarya and further,

(8) it is a work composed sometime after 1000 A. D. by some author who may have borne the name Samkara.

I would, therefore, request the Editors to examine their evidence about the authorship of the poem and the genuineness of the verse in the light of the view urged by me above to the effect that the work, Saundaryalaharl is not the work of the great Indian philosopher of the 9th Century but a late production of some learned pandit with deep devotion to the Devi, the subject of the poem.

The reference to nose-ornament in the Saundaryalahari quoted above is analogous to the following late references 1 to it in other Sans-krit works:—

(1) About A. D. 1080 -- Bilhana in his Vikramānkadeva-Carita refers to नावाबस and 安田中華.

Verse 79—" नासावंदाविनिर्मुक्तसुकाफलसनाभिना

भाति भाळतबस्थेन बालचन्द्रनविन्दुना "

(2) A. D. 1257—Jalhaņa in his anthology Süktimuktüvali.

I have also pointed out that another work commonly ascribed to Śri Śaṃkarācārya contains a reference 2 to the nose-ornament in verse 45:— " महत्तामुरशे कृहत्त्र गिरिजे नासाविभूषाविमाम् "

This work also is not regarded by scholars as a genuine work of the great philosopher and there is no reason why the Saundaryalahari also should not be treated likewise 3 in view of its reference to nose-or-

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Karnājak." In the Pürvaplihikā of the Dafalumāra Carifa (IV Uechvāsa -p. 28 of P. V.

Kulkarni's Edn., Bombay, 1919) we have a list of woman's ernaments as follows:—

्र माण नृपुर मेखला कङ्कण कटक ताटङ्कहार श्रीम कन्जलं वनितायोग्य मण्डनजातं "

The Purcept thild is regarded by Dr. A. B. Keith as "so part of Dandin's work" (Sans, Lif. p. 298)

Vide p. 320 of Annals, XIX, Part IV (1989).

2. Amale XIX, p. 830 —Reference from त्रिपुरसुन्द्रीमानसपुतास्त्रोत्र

3. Dr. Belvalkar enumerates over 210 Stotras which he considers as "not genuine works of Srt Samkarnearya." This number includes Stotras addressed to the consert of Stva under names (1) Deci (2) Tripper Sundari or Sundari (2) Bhavhel (4) Lolith (5) Ambh under names (1) Balb. (7) Kall, or Khikh (8) Gauri or Girija (9) Syamb or Syamalh and (10) (Continued on next page)

nament. These two references to nose-ornament in two different works ascribed to Samkarācārya should lead us to a regular search for references to nose-ornament in other works included in the Vani Vilas Edition of the Works of Samkarācārya. Though I cannot undertake this inquiry at present I may record below some other references to nose-ornament in the works commonly ascribed to Samkarācārya:—

In the Mantramatrka-puspamala-Stava i the following verse 6 contains a reference to नामामीचिक:—

> " इंसैरप्यविक्षोभनीयगमने दारावक्षीमुख्यकां दिन्दोलयुनिहीरप्रितवरे हेमाइवे कदणे । मञ्जीरी गणिकुण्डले मुक्टमप्यर्थेन्दुच्दामणि नावामीकिकमङ्गुलीयकटकी काळीमपि स्वीकस ॥ ६ ॥ "

In the Devi-Catuh Sastyupacarapūjā-Stotra 2 the nose-ornament is referred to as " नासापुटे मीकिकम् " as will be seen from the following verse 20:—

" धम्मिले तव देवि हेमकुसुमान्याधाय फालस्थले मुक्ताराजिवराजमानशिलकं नामापुटे मौक्तिकम् । मानमीक्तिकालिकां च कुचयोः सर्वोङ्ग्लीपूर्मिकाः कटयो काञ्चनकिङ्ग्लिविनिद्ये स्लावतंसं असी ॥ २०॥ "

In the Yamundataka there is a reference to मौक्तिक as नाविकभूषण of goddess Yamunā in verse 7 :—

" करिवरमीकि बनासिक भूषणवात बमस्कृत चन्त्रल के मुखकमलामलसीर भवण्यलमत्तमधुद्रतलो चनिके। मांगाणकुष्यल लोलपरिस्फुरदाकल राण्डयुगामलके जय युग्ने क्य भीतिनिवारिण सैकटमाकिनि पावस मास्॥ "

Concluded from last page]

Sies, Parenti, Malangi, Sahaja, Jehlamukal. Rajarajeleari. (Vide p. 223 of Bass Mallik Lectures Part I. 1929). About the work Anandolahori Dr. Belvalkar regards " it as probably the genuine work of Samkarardrya" but he specifies this work as " Consisting of 20 Stanzas in Sikharini metre and honoured by over 10 Commentaries, one attributed to Samkara himself" ("as printed in the Vani Vilas Edition Vol. 17, pp. 159-164 and to be distinguished from the Samedorpulabori in 100 Stanzas. The authenticity of the work is not, however, absolutely certain.")

^{1.} Vani Vilas Edition, Srirangam, Vol. 17, 210.

^{2.} Vani Vilas Edn. Vol. 17, p. 223,

S. - Do. -- Vol. 18, p. 99,

In the Bhramarambaşţakam 1 we find a reference to मुकामणी on the tip of the nose of the goddess in verse 1:-

भ चाम्चस्यारुणसोषनाञ्चितस्यारुणसंस्थाणी स्थापना व्यवस्थारुणसंस्थाणी स्थापना व्यवस्थारुणसंस्थाणी स्थापना ।
चारुमोर्ग चरावर्षमार्ग स्थापना मणीर जिता ।
श्रीशिस्थस्यामिनी भगवती श्रीमातरं भावये ॥ १ ॥ "

If the verses containing a reference to nose-ornament quoted above form part of genuine works of Samkara it would appear that the great Indian philosopher was a great devotee of not only the goddess but of her nose-ornament as well. It appears to me that all these works containing the references to nose ornament are not the works of Samkara and that they were composed after A. D. 1000. The following table will sum up the six references to nose-ornament in works ascribed to Samkara and included in the Vani Vilas Edition of his works:—

No.	Work	Vani Vilas Edition	Manner of Reference
1	सींद्रयंज्डरी	Vol. XVII, p. 140	ं नामावंश" and "मुकामणि"
2	त्रिपुरसुंदरीमानसपूजास् <u>नोत्र</u>	Vol. I, p. 197	"मीकिका", " नामाविभूषाम्"
8	सम्ब्रमातृकापुष्पमास्त्रस्तव	Vol. XVII, p. 250	¹⁵ नासःमीकिकम् ²⁵
4	देवीचतुःपष्टयुवचार	Vol. XVII, p. 223	ं नामापुटे मीकितम् "
5	यमुनाष्टक्स् ना प्राप्त	Vol XVIII, p. 99	ं ग्रीकिक नासिकभूषण "
6	श्वमराम्बाष्टकम्	Vol. XVIII, p. 119	¹⁷ नासिकामाविल नन्युक्तामणी ²⁷

Evidently all the works mentioned in the above table were composed after the nose-ornament had taken possession of the Hindu society and culture, not to say religion in view of the fact that in all the six cases recorded above the poet has described the nose-ornament in the nose of the goddess.

^{1.} Vani Vilas Edu. Vol. 18. p. 119.

15. The Egyptian Nose-ring as described by E. W. Lane (A. D. 1833-1835) and its Biblical ancestry*

In 1939 I published a paper on the "Antiquity of Hindu Nose-Ornaments" (Annals of B. O. R. Institute, Vol. XIX, pp. 318-334) in which I tried to establish that this ornament is a foreign importation into India and that it was imported into India some time about A. D. 1000. Subsequently I noted some references to "nose jewels" in the Bible and requested my friend Prof. R. T. S. Miller of Bombay to examine them closely. In 1942 Prof. Miller published the result of his examination of these and other references to nose-rings (Hebrew, negem) in a paper on the "Nose-Ring in the Old Testament" (New Indian Antiquary, May 1912, pp. 25-30). Of the eleven passages examined by Prof. Miller, four use the word undoubtedly in the sense of " Nose-ring." These passages are:

(1) Genesis xxiv. 47; (3) Isaiah iii. 21;

677

- (2) Proverbs xi. 22;
- (4) Ezekiel xvi. 12.

According to Prof. Miller these passages "do not all show a very favourable attitude to such ornaments" and indicate that it was a "foreign importation" among the Hebrews, who might have inherited this custom from the ancestors they had in common with other Semitic people."

Prof. Miller further observes that the "Bedawin have kept the custom of using nose-rings to the present day." In support of this statement he quotes Burton's Pilgrimage to Mecca, p. 376, where it is stated : The ornaments (of the Bedawin) are bracelets, collars, ear-and nose-rings of gold, silver or silver-gilt."

The Bedonins are a very ancient tribe. They are referred to as Aumu in one of the inscriptions in a tomb of Beni-Hasan (near Harmopolis) belonging to about 1900 B. C. A tomb of the Fifth Dynasty (c. 2560-2420 B. C.) furnishes evidence about the earliest contact between Egypt and Syria-Palestine. About 1950 B. C. an official of the name Sinuhe (from Egypt) fled to Southern Palestine and there settled among the Bedawins, who were called "plunderers" or "sand-dwellers" by the Egyptians, 1 I cannot say anything about the source of the nose-rings current in Palestine at the time when the section of Genesis containing a reference to nose-rings was compiled (about 850 B. C. as stated by Prof.

Journal of Kalinga Historical Research Society, March 1947, Vol. 1, pp. 181-288.

^{1.} Vide chapter 9 on " Egypt and larged " in Legacy of Egypt by S. E. K. Glanville Oxford, 1948, p. 219.

Miller). Whether the ancient Bedawins (Aamu) or the ancient Egyptians had among them the custom of wearing nose-rings prior to say about 850 B. C., is a problem on which we should expect some light from the Egyptologists. I want, however, to put on record the following evidence about the use of nose-ornaments by ladies in Egypt between A. D. 1833-1855 as recorded by Edward William Lane in his Account of the Manners and Customs of the Modern Egyptians, edited by Alexander Gardner London, 1895. Chapter XXI of this book deals with "Egyptian Female Ornaments" (pp. 561-572) some of which are described in detail. I note below the names of these ornaments as given by Lane:

L ORNAMENTS USED BY LADIES OF MIDDLE ORDERS:

(1) Diamond Kurs; (2) Gold Kurs; (3) Kussah; (4) Enebeh; (5) Shawāteh; (6) Reesheh; (7) Hitāl: (8) Kumarah; (9) Sākiveh; (10) Ood es-saleeb; (11) Misht; (12) Halak (ear-rings) of many kinds; (13) Ekd (necklace) of many kinds; (14) Khatims (finger-rings, debbh is a finger-ring without a stone); (15) Asāwir (Bracelets); (16) Ornaments of the hair, safa, bark etc; (17) Khulkhul (Anklets); (18) Hegāb (amulet). II. Ornaments used by Ladies of Lower Orders:

(1) Halak (ear-rings); (2) Khivam or Khuzam (nose-ring); (3) Ekd (necklace); (4) Tok (a ring for the neck); (5) Finger-rings; (6) Asawir (bracelets); (7) Hair ornaments, Okoos etc.; (8) Khulkhul (anklets).

About the nose-rings Lane observes (Page 571) 1:

"The Khizam" or nose-ring commonly called "Khuzam" is worn by a few of the women of the lower orders in Cairo and by many of those in the country towns and villages both of Upper and Lower Egypt. It is most commonly made of brass, is from an inch to a half in diameter; and has usually three or more coloured glass beads generally red and blue, attached to it. It is almost always passed through the right ala of the nose, and hangs partly before mouth, so that the wearer is obliged to hold it up with one hand when she puts anything into her mouth. It is sometimes of gold. This ornament is as ancient as the time of the patriarch Abraham" and is mentioned by Isaiah (iii. 21) and by Ezekiel (XIV. I2). To those who are unaccustomed to the sight of it, the nose-ring is certainly the reverse of an ornament."

The above extract about the nose-ring as a female ornament current in Egypt more than 100 years ago may be taken to be accurate as

^{1.} On this page there is a wood-out picture of the face of a woman wearing the seasring and on either side of the face are pictures of nom-rings with beads.

^{*} See Genesia, XXIV, 47, where in our common version "er-ring" is improperly putfor "noss-ring."

Lane's book was characterized in his days as "the most remarkable description of a people ever written." In the Biographical Sketch 1 (pp. vii-ix) to this book the editor states that this book "remains to this day the standard authority on its subject."

In Lane's remark about the Egyptian nose ring the following points are noteworthy:-

- (1) Use of the nose-ring among the ladies of the lower orders in Egypt.
- (2) Currency of the nose-ring among some of the ladies of lower orders of Cairo and among many ladies in the country towns and villages of Upper and Lower Egypt.

It would appear from the above observations that the nose-ring in Egypt must have had some previous history. If this supposition is correct we are curious to know this history as vouched by ancient and mediaeval Egyptian records. Egypt seems to have been in contact with India long prior to A. D. 400. C. H. Roberts in his chapter on the Greek Papyri in the Legacy of Egypt (edited by Glanville, Oxford, 1943), p. 270, states that it is to a single papyrus of A. D. 359 that we owe the knowledge that the government was taking steps at that time to revive the trade between Egypt and India. In view of this early contact between Egypt and India it would have been easy for the nose-ring to migrate to India long before A. D. 1000, when it first appears in Indian literature. We must, therefore, investigate the exact source of the Indian nose-ornament and try to determine whether it was introduced into India by the Egyptians or by the Bedawins of Palestine, who have kept the custom of using nose-ring upto the present day as stated by Prof. Miller.

2. Vide p. 421 of Cambridge Ancient History, Vol. II (1926). In the remarks on Egyptian costume we find the women using brooch, andals of wood and leather, ear-ring, neck-lace, ear-stude, armlets or langle (used by men and women). There is no reference to any ness or ment in this description of Ancient Egyptian costume say before B. C. 1000 Ear-rings were probably introduced from Asia after the middle of XVIIIth Dynasty.

^{1.} I note some points from this elected: Edward William Lane, born at Hereford on 17th September, 1801—went to Egypt in 1825 to improve his health—studied Arabic language as also the people of Egypt—adopted native costume and was generally taken for a Turk—sugaged two Profesors to Instruct him in Arabic and in Muslim religion and law—adopted Arabian life and manuers—gained entire confidence of the Arabe—Lane wanted to make the Egyptians known to the world—returned to England in 1838 with his Description of Egypt complete—returned to Egypt in 1833 for revising his book, which was ultimately i sucd in 1836 in 2 Vols., illustrated with wood-cuts drawn by the author—great success of the book—two years later Lane brought out his translation of drabics Nights and subsequently some other works—Lane died at Worthing, Sussex, on 10 th August, 1876 in his 75th year—his grand-nephes S Lane Poole completed the publication of Lane's Lexicon (1876-1890), a work of highest authority—Lane was made a D. Litt, of Leyden University and was a Civil List Pensioner of the British Government.

16. The Hindu Nose-ornament - Its Past and Present*

Every one knows Spenser's dictum "Decoration precedes dress", as applied to mankind in general. Though love of ornaments is natural in man, its excess is sometimes attributed to Oriental people. Though our Aryan ancestors may not have been excessively fond of ornaments in remote antiquity, they may have developed this love when they settled in India and came into contact with other races and cultures. We find accordingly quite a big list of male and female ornaments mentioned by Bharata in his Natya-Sastra. In this list the Nose-ornament is conspicuously absent.

At present the nose-ornament of varied types and designs is corrent in all parts of India from the Himalayas to Cape Camorin among Hindu as well as non-Hindu ladies. I am, however, concerned here only with the history of the Hindu pose-ornament. In the present state of this problem, I am inclined to hold the view that the Hindu ladies, who had practically an ornament for every part of their bodies before 1000 a. b., picked up the nose-ornament from savage tribes among whom it appears to have been current, if we are to judge their past by their present customs. The anthropologists have already recorded evidence which shows that all savage tribes in Asia, Oceania, Australia, Africa and America have had the custom of boring not only the septum of the nose and putting pendants or rings through the hole, but of boring the sides of the nostrils and inserting nose-pins into them. In view of this evidence, it is reasonable to suppose that the Hindu ladies must have adopted the custom in imitation of the savages about 1000 a. p. Sea-faring nations into contact with wild tribes of the different parts of the world referred to above, may have introduced it into India.

Recently I discovered some references to nose-jewels in the English translation of the Old Testament of the Bible. I have asked a Biblical scholar to examine these and other references to the nose-ornament in the Bible and report if these references are genuine. In case their genuineness is supported by Hebrew, Greek and Latin translations of the Bible, we may be able to take the history of the nose-ornament backwards from 1000 a. b. to about 200 s. c. But even then the question will remain: "What is the genesis of nose-ornament and its history prior to 300 s. c.?"

^{*} Ratemitpa, Hajapur, 1941 . pp. 22-24.

This question must be answered by students of proto-Indian history and anthropology. I can only say that the custom of boring the nose or any other part of the body is a savage one and needs to be abandoned by Hindu ladies. At any rate the Nath (न्य), with all its jewels and rubies, should be discarded by our women-folk, though it is wrongly regarded as a sign of married bliss. Its wearing is not supported by any text on Hindu Dharma-Sastra from the earliest to the last. But custom lends enchantment to the face, and our orthodox sisters are not inclined to leave the Nath to the savage tribes; on the contrary, they make their husbands pay a heavy cost for this ornament which has got the halo of antiquity at least of the last 1000 years. Though our educated sisters are not much fond of this ornament, I find at least some of them wearing this ornament on some occasions in families where orthodoxy has not yet completely disappeared.

At present, the type of the nose-ornament differs with different provinces of India. But even in the 16th century, the Ain-i-Akbari mentions four varieties of nose-ornament viz. the Besar, Nath, Phul etc. This evidence shows the gradual evolution of the types of the nose-ornament on Indian soil in civilized society. Some time ago an article appeared in the Illustrated Weekly Times with photographs of ladies of the Chamba State wearing very complicated nose-ornaments with gold plates and chains hanging from the noses. One shudders to see this harness of the female nose, which hinders the beauty of the nose instead of enhancing it. But "Frailty, thy name is woman" says Shakespeare, and women are slaves of ornaments in a much greater degree than men. "Kanaka" and "Kāntā" are inseparably connected from remote antiquity and let us hope that education may be able to separate them at least so far as the nose-ornament is concerned.

The history of the nose-ornament so far revealed shows, in an admirable manner, how Hindu culture has acquired foreign elements through centuries and digested them thoroughly. Recently I have sent for publication the texts of two religious poems, one in Marathi and the other in Sanskrit, based on nose-ornament as their central theme. I have published another paper on references found in Stotras, the authorship of which is ascribed to Sri Sankaracarya, but which appear to me to be late works, with which this great Indian philosopher had nothing to do. In fact, I can say that any work containing references to the nose-ornament is later than 1000 a. D., as no literature—Jain, Buddhist or Brahmanical—prior

to 1000 A. D. contains any reference to nose-ornament. In the same manner, no sculpture or painting earlier than 1000 A. D. contains any representation of the nose-present at least in India.

The future of the nose-ornament is, of course, quite uncertain, and one cannot say whether the mass-mind of India can discard it at once like many other customs, which were once current, but became obsolete in course of centuries. Cleopatra's nose made history in classical times, and people wished it was a little bit shorter; but that was not to be. In the same manner, one cannot feel sure whether our women folk would discard their nose-ornament finally and change the course of Indian cultural history as a result of the labours of historians, which only excite the interest of the people for a short time and then get buried in the penderous volumes on our book-shelves, as there is no law to control our present literature in so far as it affects our culture, and no dictator to weed out foreign elements from it, healthy or otherwise.

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17. The Nose-Ring in the Old Testament*

174

By R. T. S. Miliar, Bomboy.

[In 1939 I published a paper on the "Antiquity of the Hindu Noseornament" in the Annals of the Bhandarkar Institute [Vol. XIX, pp. 313-334) in which I tried to prove that this ornament is a foreign importation into Indian culture. I further traced the history of this ornament in Indian sources from A. D. 1000 onwards but was unable to truce any references to it in Indian sources prior to a. D. 1000. In view of these findings I was curious to investigate the history of this ornament prior to A. D. 1000 in any source other than Indian and accordingly carried on a cursory perusal of the Bible. To my great surprise I found in the Bible some references to the nose-jewels. In this connection I had a discussion with my friend Prof. D. D. Kosamer, who advised me to consult some scholar, competent to study all the references to the nose-ring in the Bible and to prepare a critical note on them for publication in the New Indian Antiquary. As a result of Prof. Kosambi's inquiry through Prof. John Maclean of the Wilson College, Bombay, I was fortunately introduced to Prof. h. T. S. MILLAR of the same College who kindly agreed to my request and prepared the following interesting note on the "Nose-ring in the Old Testament". I take this opportunity of thanking all these friends for their willing cooperation in pursuing my inquiry about the antiquity of the Nose-irnament prior to A. D. 1000. Prof. MILLAR thinks that the custom of wearing the nose-ring might have come to the Hebrews from the ancestors they had in common with other Semitic peoples - P. K. Gope.]

The following does not attempt to be more than a note on the use of the Hebrew word nezem in the Old Testament or Hebrew Bible. The s gnificance of this is that it indicates that nose-rings were in use among the people of the Hebrews several centuries before Christ.

The word nezem means an ornament in the shape of a ring, and this seems always to have been made of gold. The dictionary gives two meanings: "nose-ring" and "ear-ring", because in some places where it is used it is obviously attached to the nose, and in others it is certainly an ornament for the ears.

There are eleven passages in the Old Testament where the word is used :-

^{*} New Indian Antiquary, May 1942, pp. 25-30.

Genesis 24, verses 22, 30, 47.
Genesis 35, verse 4.
Exodus 34, verses 2, 3.
Exodus 35, verse 22.
Judges 8, verses 24, 25, 26.
Isaah 3, verse 21.
Ezekiel 16, verse 12.
Hosea 2, Verse 13.
Job 42, verse 11.
Proverbs 11, verse 22.

Proverbs 25, verse 12.

In two of the above passages there is a direct reference to ears. The first is Genesis 35, 4. The Hebrew is as follows:

weeth hannezamin 'a sher be' ozněhem ;

which is translated in the Authorised Version of the Bible as

The Revised Version translates:

"the rings which were in their ears;"
and Professor MOFFATE, in A New Translation of the Bible, as

"their amulets of ear-rings."

The other is Exodus 32, 2, 3.

"wayyōmer 'a tëhem ' aharōn pāreqū nizmē hazzāhābh 'asher ka' oznē neshēkhem benēkhem übhenothekhem "

" And Aaron said unto them

"Break off the golden earrings, which are in the ears of your wives, of your sons, and of your daughters." (A. V.)
"... Break off the golden rings" (R. V.)

MOPPATT also translates carrings.

As the word nexem (plural nexamin) in these passages undoubtedly means an earring, the earlier translators seem to have attempted to read this meaning into the word in all cases where that was at all possible. The Septragint (the Greek version of the Old Testament) translates in all cases by emotion, an earring. The Vulgate follows suit with incures, but finds difficulty in two passages, where it uses other words. These will be dealt with later. The Authorised Version (English, 1611) followed the Vulgate, translating by earring except in these two cases. The Revised Version (English, 1881) alters to none-ring in a number of passages, and seems to give the correct rendering in most cases. This, with MOFFATT's

Translation, may be treated as the last word on the subject as far as translation is concerned.

Besides the passage dealt with above, there are several of the passages in question where there seems to be little doubt that earrings are referred to. These are:

Judges 8, 24

ûthenû-li ish nezem shelâlo ki-nizme zâhâbh lahem ki yishmeelim hem "give me every man the earrings of his prey (for they had golden earrings, because they were ishmaelites)" (A. V.)

The R. V. and MOFFATT also translate earrings.

Job 42, 11

- " wayittenû lê îsh nezem zahâbh ehâdh "
- " every man gave him an earring of gold " (A. V.)
- " every man gave him a ring of gold " (R. V.)
- " a gold ring " (MOFFATT)

The chief reason for the assumption that earring is the correct translation in these passages is that the rings seem to be for wearing by men, and all the evidence shows that nose rings were only worn by women.

Three of the passages just dealt with (Genesis 35, 4, Exodus, 32, 2, 3, and Judges 8, 24) have an interest of their own as indicating that the rings described were associated with heathen practices or heathen peoples. In the first passage Jacob's household is purified by putting away strange gods and divesting themselves of their earrings. In the second passage earrings are melted down to make the golden calf which the Israelites worshipped sinfully in the wilderness. In the third passage, earrings are taken from the defeated Ishmaelites. It was considered natural that they should have golden earrings, because they traded for gold and silver, which they brought from Egypt and Arabia, Pliny (Natural History xi, 50) refers to the wearing of earrings by men of the East. There is said to be no such custom among the Bedawin (the descendants of the Ishmaelites) to day. The earrings seem to have been regarded as amulets. (See MOFFART's translation and Peake's Commentary on the Bible.)

There are three passages where the meaning of the word might be either "earring" or "nosering" These are:-

Exodus 35, 22

"wayyabho'ü ha'snashim al-hannashim kol nedhibh lebh hebhi'ü hah wanezem wetabba' ath wekhümaz kolkeli zahabh "And they came, both men and women, as many as were willing hearted, and brought bracelets, and earrings, and rings, and tablets, all jewels of gold." (A. V.)

MOFFATT translates earrings.

In this passage there is another word hah, here translated bracelets or brooches, which means usually a hook or ring put into the nose of animals such as the camel, and which may here mean nose-rings. It does not seem to be used for a human ornament elsewhere.

Proverbs 25, 12

"nezem zāhābh yaḥali-khāthem mökhiaḥ ḥākhām al-özen shōmā'ath"

"As an earring of gold, and an ornament of fine gold, so is a wise reprover upon an obedient ear." (A. V.)

The Revised Version is the same, but gives the marginal alternative nose-ring.

"A golden earring, a necklace of rare gold, an apt word is like that." (MOFFATT)

Here the context seems to provide a case for taking the meaning as earring, though nose-ring, as in the last pastage, has the support of the Revised version margin.

Hosea 2, 13

"üphäqadhti 'älehä eth-yemë habb'älim '*sher taqtir lähem watta-'adh nizmäh w*helyäthäh"

"And I will visit upon her the days of Baalim, wherein she burned incense to them, and she decked herself with her earrings and her jewels" (A. V.)

The Revised Version again has nose-rings as an alternative reading in the margin.

"..... decking herself with rings and jewels" (MOFFATT)

In this last passage there is again a reference to heathen practices, popular religious ideas required certain ornaments for holy days (compare the Koran, Sura 20 verse 61: on the day of ornament (i. e. the feast day be your meeting). There does not seem to be any evidence that nose-rings were regarded as amulets, but they may have been worn with other ornaments on holy days.

There remain four passages where the word nerem undoubtedly means nose-ring. In each of these the word is used along with the Hebrew word 'aph, which means nose. They are:

Genesis 24, 47, Proverbs 11, 22, Isaiah 3, 21, Ezekiel 16, 12, Genesis 24, 47.

" wā'āsim hannezem al-'appāh "

"I put the ear-ring upon her face" (A. V.)

"...... the ring on her nose" (R. V. and MOFFATT).

" suspendi inaures ad ornamendam faciem eius " (Vulgate)

" kai perietheka aute ta enotia" (Septuagint)

Here the Septuagms, the Vulgate and the Authorised Version all continue to translate earning. They get out of the difficulty created by the presence of the word 'aph, by translating it face, which is possible in some contexts. But it is unlikely here, and in any case could hardly stand for ear.

Ezekiel 16, 12

" wa'ettên nezem al-appêkh wa'eghllim al-oznayikh "

"I put a jewel on the forehead, and earnings in thine ears " (A.V.) which also has nose as a marginal alternative for forehead).

"I put a ring upon thy nose, and earrings in thine ears " (R. V.)

"ed dedi inaurem super os tuum " (Vulgate)

The prophet is here describing the beauty that God has bestowed on Jerusalem, who is depicted as a false woman who has made evil use of the beauty and ornaments that have been given her. There is no doubt at all that a nose-ring is the ornament referred to. Another word 'aghilim is used for earrings.

Isaiah 3, 21

" hattabba'oth wenizme ha'aph "

(The word preceding this is hall hashim which means charms or amulets and is translated by the Authorised Version as earnings).

"The rings, and nose jewels" (A. V. and R. V.)

" signet-rings and nose-rings (MOFPATT)

"et annulos et gemmas in fronte pendentes" (Vulgate)

Here the Vulgate departs from its use of the word inaures, and translates by the nondescript word gemmas. It uses inaures to translate hall-hd-shim in the preceding verse. This is part of a catalogue of the ornaments worn by the proud women of Jerusalem, who Isaiah says will be made desolate for their pride and luxury.

Proverbs 11, 22

" nezem zāhābh be aph hazīr ishshāh yaphā weşarath ta am "

"As a jewel of gold in a swine's shout, so is a fair woman which is without discretion." (A. V. and R. V.)

The Revised Version gives ring in the margin as an alternative for jewel.

"a golden ring in the snout of a sow" (MOFFATT)

"circulus aureus in naribus suis " (Vulgate)

"enotion en rini huos" (Septuagint)

Here the word is used humonrously in a simile, but it must mean a nose-ring such as ladies wear, as it is in a nose, albeit a pig's nose. MOFFATT makes this clear by translating by the word sow. The Vulgate uses yet another word circulus, but the Septuagint sticks to enotion.

The passage in Genesis 84 tells us something more about the ring in

question. In verse 22 it is described as-

"nezem zāhābh beqa' mishqālo" "a golden earring of half-a-shekel weight" (A. V.) "a golden ring" (R. V.) "a golden nose-ring weighing a quarter of an ounce" (MOFFATT). This ring was taken by Abraham's servant Eliezer to put on the nose of Rebecca, who was to become the wife of Isaac, Abraham's son.

The passages in which the word nezem undoubtedly means nose-ring do not all show a very favourable attitude to such ornament. This, and the places at which we find the word used, seem to indicate that the nosering was a foreign importation, or at any rate regarded as such from the fact that it was used by the heathen tribes with whom the Israelites were surrounded. Isaiah regards the use of nose rings and other ornaments as symbolic of the pride of the women of Jerusalem, who are to be punished for that very fault and all their finery taken away. This prophecy was probably written about 785 B.c. and Isaiah was protesting against the state of affairs and in particular the luxury of Jerusalem at the beginning of the reign of Ahaz king of Judah. The prophecy of Ezekiel is later, probably at the time of the exile about 596 B.c. Here the nose-rings, with the crown and the earrings, are symbolical of the blessings which God has showered on Jerusalem. But Jerusalem has abused these bounties (verses 15 to 19) and they have been a snare to her; and as a punishment she will be carried away captive into Assyria.

The section of Genesis from which the first passage (Genesis 22) comes belongs to the so-called Jahwehistic narrative, the date of whose compilation must have been about 850 s.c. The reference to nose-rings must belong to this original writing of the story, or an even earlier tradi-

Pentateuch is made up were put together. It is thus earlier than the other passages just referred to and it is obvious that the giving of the nose-ring as a token is accepted as the natural thing. The story purports to belong to pre-Israelitish times, when the patriarchs were settling in Canaan and had not yet abandoned their nomadic existence. Their way of life may be said therefore to have been akin to that of the Bedawin, with whom they recognised their kinship in the story of the half-brothers Isaac and Ishmael. It is not surprising, therefore, to find that the Bedawin have kept the custom of using nose-rings to the present day. "The ornaments (of the Bedawin) are bracelets, collars, ear and nose-rings of gold, silver or silver-gilt." (Burton, Pilgrimage to Mecca, page 376). The supposition is that as the Israelites became a settled people and their nobility grew more luxurious, the wearing of jewels was more and more confined to the rich, and was frowned upon by the stricter sort of religious people.

It does not look as if the origin of the wearing of the nose-ring is to be found among the Hebrews, but the custom might well have come to them from the ancestors they had in common with other Semitic peoples.

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18. Studies in the History of Hindu Festivals — Some Notes on the History of Divall Festival*

(BETWEEN C. A. D. 50 AND 1945)

All festivals have a unifying influence in social and national life. Students of the cultural history of a nation must understand the genesis and development of these festivals and record their history with as much precision and detail as possible. The oldest living civilizations on this globe have contributed not a little to the growth of these festivals, which are a regular feature of national life. To whatever class of people these festivals may belong they have a peculiar human appeal. In India with its numerous religious beliefs we have quite a bewildering variety of religious and semi-religious festivals but unfortunately much of the writing 1 devoted to these festivals is of a descriptive type, in which no attempt is made to fathom the depths of available historical sources with a view to reconstructing any reliable history worth the name.

In 1916 one author who calls himself " Rgvedt " published a book called History of Aryan Festivals 2 (आयोगा सणाचा इतिहास) in Marathi. This

^{*} Annals (B. O. R. Institute) Vol. XXVI, pp. 219-262.

^{1.} The provincial Gazetteses of India contain much useful information about many of these festivals but it is of a descriptive type. The history of each festival ought to be studied in the form of monographs as a preliminary to an encylopsedic history of Indian Festivals. At present our knowledge of the history of festivals is rather nebulous. We cannot say when a particular festival originated and how it developed through centuries of our cultural history. Mess descriptions of the present - day festivals , howsoever enchanting, do not prove their antiquity as these descriptions are a mixture of legends and hear - say evidence with many regional variations, from which it is difficult to comprehend the origin and development of these festivals.

^{2.} This book was published in Bombay. The Preface of the author is dated 3rd April 1916 This book appears to have enjoyed a wide popularity as will be seen from the opicious printed at the end of the volume. The author deals with such topics as - (1) Bise of Indian Astronomy, (2) Seasons, (3) Months, (4) Adhibambas (intercalary month), (6) Seven days of the week, (6) Samuatsaro-phalo, (7) different Salus, (8) Sessonal Fostivals and Historical Festivals (pp. 16-17), (9) Supratura-Pratigadb, (10) Elemanavarst, (11) Dolotsava. (12) Gauri-Utsava. (13) Alizayya-Prtiya. (14) Parafurama-Jayanti. (15) Nrsimha-Jayanti. (16) Gaügotsava or Dafaharā (17) Vaṭa-Sāvitri. (18) Mahā Ekādsti (19) History of Calurmasa, (20) Nagapationni, (21) Mangala-Gauri, (22) Sravani, (28) Povati Paurpims, (21) Naraji-Paurpima, (25) Sri Krana-Janmastami, (25) Pithori-Amhehayk, (27) Pola or Vrsabhotsava, (28) Harithlikk, (29) Ganeha-Caturthi, (10) Rei-Paticami, (31) Jysvihh-Gauri, (32) Vimana-dvhdaii, (33) Anasta-Caturdaii. (34) Mahklaya-Pakya, (35) Navarātra-Mahotsava, (35) Vijayā-dafami, (37) Hāmalilā, (38) Dipivali-Mahotsava (धनत्रयोदशी ०: धनतेरस, नरकचतुदशी, लक्ष्मीपूजन), (३९) Balipratipadi. (40) Yama-dvittyh, (41) Tulafi-elehha, (42) Dhifripüjana. (43) Vaikuntha-Caturdafi, (44) Tripurt-Paurpinis, (45) Campa-pasthi, (46) Datta-Jayanti, (47) Makara-Saidramana, (48) Varanta-Palicami, (49) Ratha-Saptami, (50) Mahhiivarhtra, (51) Philguna-Uttava or Holi.

is perhaps the only book in Marathi which devotes no less than about 370 pages to the study of Hindu festivals but even here one fails to find any history as such of each festival which has governed the life of our ancestors for hundreds of years. This attempt is, however, praise-worthy as it is perhaps the only conscious effort to meet a long-felt want about the history of our festivals. In dealing with each festival the author records valuable information about its currency in different regions of India, the ritual connected with it and the present manner of its celebration. The remarks of the author on the historical background of each festival are suggestive but not comprehensive for want of fully documented study about its origin and development. The author tells us in his Preface that his book is not written for the learned reader. All the same we must thank him for this pioneer I attempt, which is sufficiently conscientious and learned within the limitations under which he had to work and thus provide a readable account of Hindu or Aryan festivals as they are observed in India in the different months of one Hindu year.

According to Rgvedi the Hindu foestivals can be roughly classified 2 as follows:-

^{1.} I must not fail to mention here a still earlier book on Hindu festivals. This is called " Hindu Holidaps " by Balaji Sitaram Kothars, printed at the Times Press, Bombay, 1904, pages 100. The author contributed his articles on this subject to the Times of India in the years 1900 and 1901 and these have been presented in a book-form with the above titls. About festivals the author rightly observes :- " The life of a nation is best depicted by the description given of its festivals, and the Hindus, being a civilized nation from remote antiquity have had their own kolidays both to create and express joy. Hero-worship, religious devotion, social enjoyments, and the observance of particular rites and occomonies with definite object in view such as preservation of women from widowhood, freedom from the guilt of committing believes crimes, the preservation of children from destis in infancy, the acquisition of wealth, the restoration of lost power, fortune or kingdom, the comembrance, worship or feeding of the departed spirits of anosators have their characteristic holidays."- The book deals briefly with the account of the following Holidays: - (1) Gudi Padva, Bamasavansi, (2) Hanuman Jayantt, (3) Vala Pornima, (4) Athadi Ekadashi, (5) Nag Panchami, (6) Cocoanut Day, (7) Janua and Goliul Ashtami, (8) Pitheri Amavaria, (9) Ganesh Chaturthi, (10) Gaurt, (11) Famars Decadashi, (12) Anant Chaturdashi, (13) Hindu anniversary Days, (14) Navaratra Pestival, (15) Danara, (18) Kojagari Pornima, (17) Dewall, (18) Four Hindu Holidays, (19) Datta Jazanti, (20) Makara Sankrant, (21) Makashivaratra, (22) Holi Festival.

^{2.} This classification is good enough so far as it good. It is only after a thorough historical study of each festival is recorded that an accurate classification can be given. As regards the ritual and belief connected with some of the Hindu festivals see Keys of Power by J. Abbott (Methuen & Co., Londou, 1933). I note some points from this book about the Dickli:— Dickli. 204-200; maidens wave artis at D., 63, 183, impression of hand made on cattle at D. 135; Oil applied to the body at D. 159; Lights waved before cattle at D. 181; Foot-prints drawn at D. 146; Worship of implements at D. 230; Manavadi days during D. 252; Use of red water at D. 252; Seed. drill dressed in garments of a woman at D. 357; Worship of Lakemi on the threshing at D. 363; Pole of the threshing-floor out at D. 370; Grinding forbidden at D. 480,-it would be useful to study the history and chronology of these practices from datable sources, Sanskrit and non-Sanskrit.

- (1) Festivals originating from Rtus or Seasons:-संबत्सर प्रतिपदा, अक्षरपतृतीया, चातुर्मास आवणी, नारळी पौर्णिमा, विजयादशमी, दीपावळी, घात्रीपूजन, मक्रसंफांत, वसंतपंचमी, होळी व शिमगा,
 - (2) Historical (Aitihāsika) Festivals:-श्रीरामनवसी, परशुरामजयंती, दशहरा, कृष्णजनमाष्ट्रनी, वामनद्वादशी ?
 - (3) Saiva Festivals :-ब्रिपुरी पौर्णिमा, महाशिवरात्र,
 - (4) Vaisnava Pestivals :-नृसिंहजबन्ती, महापुकादशी, अनंतचतुर्दशी, बैकुंठचतुर्दशी, दोलोत्सव.
 - (5) Kautumbika Festivals: -वटसावित्री, मंगलागीरी, पिठोरी बमावास्या, इरितालिका, ऋषिपंचमी,
 - (6) Šākta Festivals :-गौरी-उत्सव, ज्येष्टागौरी, छलितापंचमी, सरस्वती, देवी नवरात्र, चंपायष्टी (१)
 - (7) Saura Festivals :- रचसम्मी.
 - (8) Ganapatya Festivals :-- गणेशचत्रभी.

For studying the regional variations in the celebration of different Hindu festivals one must get first-hand information about these festivals from the residents of the different regions, where these festivals are observed. In the absence of this information we can get some information about them in the Provincial Gazetteers, 1 some of which were written in a scholarly manner and hence may serve as a useful starting point for a historical study of the different festivals as they show the ourrency or otherwise of these festivals in different regions, where some of the old traditions have been preserved. We must, however, go from

The Encyclopaedia of Religion and Ethics contains some references to DieAli (see IV, 607 a; Ahir, I, 282b; 985 a; Bhil, II, 555b; Davars, V Sa; Dravidian, V, Sa, 14a, 19ab; Poeras V, 19h, Sacrifice, V, 14a,) - The description of Dravidian Divili (V, 19ab) has the following features:-

(1) Lights are used probably as a means of expalling evil spirits-

(2) Sacrifics of goats and towis before stones, painted red after bringing them from a neighbouring river-bed.

(3) Dancing and feasiing attended with lighted torones.

(4) Cattle are decorated with colour and garlands and a figure of the cattle-god Bd-

listdra is made and kept in the cow-shed.

(5) Procession of the fiercest bull and the swiftest helfer through the village - Any lad who can snatch a garland from the bull or helfer is considered a fit match for the best girl in the neighbourhood.

The Bombay Gazetleer contains the following references to Disali holidays: — Vol. IX. pt. 1, 23, note 5, 54, 82, 119, 151, 170, 173, 175, 178, 203, 305, 306, 316, 336; Pestival days among Bhila, id, pp. 305-306; Fire-Worship on-id 387; Days for settling accounts by traders id, 32; Period best suited to subject swil spirits, IX, pt. ii, 145; Hindu New year considered an swil spirit time, id. 148; Buddhist Holidays XIV, 145; among Patane Prachus, XVIII, pt. 1, 261-258; among Kunhis, id. 294-295.

the present to the past and thus try to study when and how the details of these festivals have originated and thus enriched the social, religious and cultural life of India.

In his article ¹ on Divali-Folklors Mr. B. A. Gupte observes: —
"Holidays in all countries have their folklore, and the Divali of India is no exception. The greater the number of folk-tales, the higher the stage of development in the society, and the greater the interest we find attached to the evolution of the festivities." Mr. Gupte then records half a dozen different folk notions, of which No. V is as follows:—

"The fifth idea has a historical basis. It is that King Vikramaditya of Ujjain, a scion of the Gupta race was crowned on this day, the 16th of Asvin and counted his era accordingly. This is thus a New year's day." From the multiplicity of accounts of the origin of Divalt Mr. Gupte discloses the following points:- (1) the change of the season, (2) the death of the rice-crop harvest, (3) the time of manuring the soil for the second crop, (4) the Sun reaching Libra, the Seventh sign of the Zodiac, (5) the coronation of Rama, and (6) the selection of this coronation day for the conventional coronation and eramaking day of Vikramaditya, the last of the Guptas. In the Plate of Divall Drawings (drawn by women from the 8th day of the 2nd half of Afvin to Divali) accompanying Mr. Gapte's article we find the following symbols:- (1) Temple ascribed to Laksmi Narayana, (2) the Sun, (3) the Moon, (4) hanging lamps, (5) Sankha Shell, (6) the mace, (7) the lotus, (8) the wheel, (9) the Svastika, (10) the Sesa or thousand-hooded cobra, (11) the cow's foot-prints, (12) sparrows, (13) the mango, (14) the bel (wood-apple) tree and (15) the foot-prints of Laksmi. According to Mr. Gupte " the presence of sparrows at harvest time, the position of the threshing floor usually near a shady tree, and the incoming realization of the sale-proceeds (wealth) as expressed by the foot-prints are significant. This is perhaps the most primitive origin of the festival."

In the Hobson-Jobson (by Yule and Burnell, London, 1903, pp. 208-209) we get some foreign notices of Divali from A. D. 1613 onwards. I reproduce here these notices with the remarks of the editors:—

Dewally, S. H. diwall, from Skt, dipa-aliko, a row of lamps i. e. an illumination. An autumnal feast attributed to the celebration of various divinities, as of Lakshmi and of Bhavani, and also in honour of Krishna's slaying of the demon Naraka, and the release of 16000 maidens, his prisoners. It is held on the last two days of the dark half of the month of

¹ Indian Antiquory, Vol. XXXII, pp. 287-288 (May 1908).

Aimin or Aim and on the new moon and four following days of Karttika is a usually some time in October. But there are variations of Calendar in different parts of India and feasts will not always coincide e.g. at the three Presidency towns nor will any curt expression define the dates. In Bengal, the name Diwalt is not used, it is Kall Pājā, the feast of that grim goddess, a midnight festival on the most moonless nights of the month, celebrated by illuminations and fireworks. on land and river, by feasting, carousing, gambling and sacrificing of goats, sheep and buffalces.

A. D. 1818 - " Divaly "

- Godinho de Eredia, f. 38 v.

A. D. 1628 — " October the four and twentieth was the Dawali or the feast of the Indian Gentiles "

-P. Della Valle, Hak Soc. ii, 206.

- A. D. 1651 "In the month of October eight days after the full moon there is a feast held in honour of Vistnou which is called Dipawali A. Rogerius, De Open-Deure.
- A. D. 1671 "In October they begin their year with great feasting,
 Jollity, sending presents to all they have any busyness with, which time is
 called Dually" —Hedges Diary, Hak. Soc. ii, cccxiv.
- A. D. 1678 "The first New Moon in October is the Banyan's Dually"

 Fryer, 110.
- A. D. 1690 " their Grand Festival Season called Dually Time" Ovington, 401,
- A. D. 1820 "The Dewalee, Despaullee or Time of Lights takes place 20 days after the Dussera and lasts three days; during which there is feasting, illumination, and fireworks"

 —T. Coats in Tr. Lit. Soc. Bo., ii, 211.
- A. D. 1843 Nov. 5 The Diwall happening to fall on this day, the whole river was bright with lamps.......Ever and anon some votary would offer up his prayers to Lakshmi the Fortuna and launch a tiny raft bearing a cluster of lamps into water,—then watch it with fixed and anxious gaze. If it floats on till the far distance hides it thrice happy he......but if, caught in some wild eddy of the stream it disappears at once, so will the bark of his fortunes be engulphed in the whirl pool of adversity. —Dry Leaves from Young Egypt, 84.

A. D. 1888 — "The Diwall is celebrated with splendid effect at Benares........At the approach of nights small earthen lamps, fed with oil, are prepared by millions, and placed quite close together so as to mark

out every line of mansion, palace, temple, minaret and dome in streaks of fire"—Monier Williams, Religious Thought and Life in India, 182.

E. W. Hopkins in his article on Hindu Festivals and Fasts in the Encyclopaedia of Religion and Ethics 1912 (Vol. V, pp. 867-871) classifies Hindu festivals as follows:—

(i) Ancient Festivals:-

(1) Moon-festival (seasonal).

- (2) 'Four-month celebration' (seasonal).
- (8) Ceremony of First-fruits.
- (4) Soma-sacrifice.
- (5) Consecration Ceremony.
 - (6) Horse-sacrifice.
- (7) Solstice-feast.
- (8) Twelve nights' Celebration.
 - (9) Sacrifices at tirthus by pilgrims.
- (ii) Modern Festivals: These festivals are new in effect, though old in general character.
- (1) Lamp Festival (Divali)— The rites in honour of one god have passed over to another without materially altering the celebration and sometimes even to-day the same celebration is held in honour of different gods. Thus the very pleasing lamp-festival in which, in autumn, lamps are lighted in every direction, floating lamps are set off down rivers etc., is celebrated by some as a festival in honour of Visun's wife, and by others in honour of Durgā, the wife of Siva Modern festivals have thrown off Brahmanism as far as possible, and are more clearly celebrations of the seasons, devoid of priestly ritual and self-sufficient.
- (2) Spring Festival of Northen India (Holi) Between the old and new there must have been a large number of special festivities now lost sight of, or only faintly reflected in intermediate literature not to speak of many special festivities in honour of gods and goddesses described in the mediaeval Puranic and Tantric literature. Some of the modern festivals are both Sectarian and Seasonal In the devil-frightening festival viz. the "lamp-festival" (Divali) the original intent of the celebration is merged in the worship of some modern deity.

(3) Makarasankranti and others -

That there were many festivals not included under the screen of religious rites in ancient times may be taken for granted and this is supported by external evidence. — Many of the Hindu festivals have a counterpart in those of other races.

It is clear from the above grouping of Hindu festivals that the Dividi or 'lamp-festival' is a modern festival according to Hopkins, I who however, does not say when it originated and developed its numerous features as we see them to-day.

In the above volume of the Encyclopaedia of Religion and Ethics there is an article by Margaret Stevenson on Jain Festivals and Fasts (pp. 875-879). In this article she describes the Diwall of the Jains as follows:—

"Next to Pajjusana the greatest of all the Jain sacred seasons is Diwāli. If the former owes its importance to the emphasis which the Jains lay on the sin of killing, Diwāli derives its position from the importance of wealth to a mercantile community, the Jains. The Jains assign a special reason for their participation in what is really a Hindu festival in honour of Laksmi, the goddess of wealth. They say it originated when Mahāvīra passed to moksa and the eighteen confederate Kings and others who were present at his passing instituted an illumination saying: Since the light of intelligence is gone, let us make an illumination of material matter (see Kalpa Sūtra, Sacred Books of the East, xxii 266).

The festival continues for four days, the last days of Asvina which close the Hindu year and the first of Karttika-falling usually within the months of October or November. Among the Svetāmbara Jains the first day (Dhanteras) of the festival is devoted to polishing jewellery and ornaments in honour of Laksmi on the second day (Kallchaudasa) the women try to propitiate evil spirits by giving them some of the sweet-

- 1. Hepkins records the following Literature pertaining to Hindu Festicule and Pauls:-
 - (1) H. H. Wilson: Select Works, H. London, 1892, Ch. iv. " Religious Festivals of the Hindus."
 - (2) Natesa Sastri : Hindu Pensis, Fasts and Coremonies, Madraa, 1908.
 - (3) W. J. William : Modern Hinduism, Calcutta, 1900.
 - Monter Williams: Hinduism, London, 1877.
 P. E. Ginzel: Handbuch der mathematischen und technischen Chronologie, Lalp-
 - sig, 1006, ff. i, 310-402.
 (5) E. W. Hopkins: Religious of India, Boston, 1895 (previous literature sited on pp. 448 and 592.).
 - (7) J. C. Oman : Brahmans, Theisis and Muslems of India, London, 1907, (esp. p. 241 ff., The Holt Festival.
 - (8) A. Hillobrandi: Die Sonnwendfeste in Alt-Indien' in Roman Forschungen, V. (1889) 229-342 and Vedischn Opfer und Zauber. Stramburg, 1897 (= GIAP, III, 2.)
 - (9) B. Lindner: Das ind. Ernteopfer, in Pentgrum an Bohllingk. Stuttgart, 1888, pp. 79-81.

meats they prepare and cook on this day. These they place in a circle at cross-roads (q. v,) in order to protect their children from evil influences during the year. The third (Amasa) is the great day of the feast. It was on this day that Mahavira went to Moksa and Gautama Indrabhilti attained to Kaivalya. This is the day on which Jains worship their account-books and decorate and illuminate their houses. In the morning Jains of all three sects go to their monasteries and convents and do reverence to the chief monk or nun present, who preaches to them on the life of Mahavira and sings appropriate songs. The more devout lay people stay and do posaha, but the generality go home and make up their accounts for the year. In the evening they summon a Brahman to direct the Sarada Paja or worship of the account-books, for Brahmans are still the domestic chaplains of the Jains. The Jain having arranged his accountbook on a stool, the Brahman enters and paints a chandalo (auspicious mark) on the Jain's fore-head, his pen and one page of the account-book. He then writes the word Sri (i. e. Laksmi) on the account-book, either five, seven or nine times in such a way as to form a pyramid. A rupee (the oldest possible) is now placed on the book ; this rupee for the time being, is considered to be Laksmi herself and the placing of it is called Laksmi-pûjd. All the year the owner will carefully guard this particular coin as it is considered luck-bringing, and will use it again next Diwalt, so that in some Jain families the coin used is of great rarity and antiquity. Besides the coin, the leaf of a creeper is also placed on the account-book and the Jain waves a little lamp filled with burning camphor before the book, on which he has placed rice, pān, betel-nut, turmeric and various kinds of fruit. The ceremony ends by sprinkling the books with red powder after which the Brahman and the Jain feast on sweetmeats. The account-book is left open for several hours and before closing it they say: Laksa labha, Laksa labha, i.e. a hundred thousand profits.

The fourth and the last day of Diwall, New-year's Day, is the first day of the month of Kārttika and of the commercial year; and the Jains then go and greet all their friends much as we might on our New year's Day and send cards to those who are absent."

If the Jaina Diwall originated with the death of Lord Mahavira for which B. C. 528-7 is one of the traditionary dates 1 we can definitely say that it is about 2400 years old. Can we establish the antiquity of the Hindu Divalt for such a period and also prove the exact starting point of

Vide p. 46 of Early History of India by Vincent Smith, Oxford, 1914, and p. 616 of Madhyayuglan-Carifra Hola by S. Chitrava Shastri, Poons, 1987. (Annals B. O. R. I).

its history? It is exactly for answering this question on the strength of documentary evidence that I have undertaken the present study. I shall, therefore, try to establish the antiquity of the *Hindu Divall* as far back as documentary evidence can take it leaving it to other investigators to improve upon my labours and give us a conclusive history and chronology of this most popular Hindu festival.

In view of the close parallelism between the Hindu Divali and the

Jain Divall we are tempted to ask the following questions:-

(1) Which is the older of the two Divalis-Jain or Hindu?

(2) Is it possible to suppose that the older of these two Divalis has influenced the younger one?

These questions cannot be answered satisfactorily unless we have reconstructed the history of both these Divilis. I shall, therefore, record in this paper some data which would reveal to a certain extent the historical background of these Divilis but before I do so I shall record a detailed description of the Hindu or Brahmanical Divili as given by Margaret Stevenson in her book Rites of the Twice-Born (Religious Quest of India Series), London, 1920, pp. 335-340. This description reads as follows:—

The great Feast of Lamps (Dipāvall, Dipāli or Divall occupies the last three days of the Indian year (the 18th, 14th and 15th of the dark half of the month of Asvina) which are sacred to Laksmi, the goddess of wealth.

The first of these three days (the Day of wealth-worship, Guj. Dhana-terasa) is extremely auspicious. Indeed so invariably auspicious it is, that no astrologer need be consulted about a child being put to school for the first time that day, a move being undertaken, newly married brides being sent to their husband's homes, or gold being given out to a gold-smith to fashion into jewellery.

As a rule, before this day there is bustle and stir, excursions and alarums in every Twice-born home, for the houses have to be white-washed throughout and decorated, the compound cleaned and the square before the door replastered and marked with a Svastika in chalk and coloured powder, and all the metal vessels, polished till they shine like gold, have to be arranged in glittering rows round the rooms in the ladies' part of the house; all the ornaments, gold and silver, have similarly to be cleaned and, if necessary sent to the goldsmith's for repair; and all the bills called in and paid. Every old-fashioned house-hold has its own tailor, washerman and goldsmith, whose dues are paid once a year now at Divall;

for not one single debt may be left outstanding. This is the time too when new vessels and new cloth are first taken into use. Old-fashioned people, who do not trust in such new-fangled things as banks, take out their hoardings on this day, wash them in milk and worship them. A fine old chief in one part of India regularly worships a thousand gold mohurs on this day. He puts them all into a huge copper-dish, pours water over them and offers them the full sixteen-fold worship, giving alms to Brahmans at the close. All three days the children let off crackers, and help to illuminate their homes by putting lights on the gates. But on this first day the boys tie white strings and clips to the end of sticks to make buzzers (Guj. Bhambudā).

These they whirl over their heads, so that their buzzing may frighten the cows. Any dust these animals kick up on this day is considered specially sacred, so the boys go and stand in the perfect dust-storm caused by the stampeding cows running away from the buzzers, and so acquire virtue without a trace of boredom!

The women with their spring cleaning finished, cook specially nice food and wear their best clothes. The houses not only of the Twice-born but of all the *Hindus* and also of *Jainas* and *Pārsis*, are illuminated, and there is universal rejoicing in the fact that all debts are paid, the harvest garnered and the rainy season over, so that every one seems happy, and the entire holiday is a festival of light-heartedness. Far different will be the following night!

The morning after the Day of Wealth-worship is still a time of gladness and rejoicing (Rilpa Caturdasi, The Day of Beauty). Men and women get up early take extra pains over their toilet, and wear their finest clothes. Every one is dressed before six, and they all have great fun calling on different friends, break-fasting with them and eating special dainties.

But the Witches Night (Kala Rātri) that follows is a parlous time, the most hag-haunted season of the whole year, for then all the evil ghosts of the wicked or of those who have died violent deaths, and the terrifying spectres of women who have died in child-birth, come out and walk the streets. But besides these black malignant spirits ordinary ghosts, demons, ghosts, wraiths and witches are also abroad. All through the year rash fools who wished to meet ghosts could find them after night fall when they haunt cemeteries and burning-grounds, or in the particular trees where they dwell, but on this 14th night of the dark of the moon of Aśvina they are not confined within their usual limits, but move freely, wherever they please.

So all wise people bide at home if they possibly can, especially if, like women or children, they are also very timid.

Hanuman, the special guardian against ghosts, has, you may be sure, more than the usual number of worshippers this night, who pour oil and red lead over him and offer him coco-nuts. In return his devotees take some of the oil that drips from his right foot, burn it with soot, and mark their eyes with it, for this not only ensures their being under the special protection of the god for the year, but also improves their sight for the same period.

Other people quiet the ghosts by making circles where four roads meet and put cakes of grain and pulse fried together in oil within the circle, and Indians of other than the Twice-born castes would worship certain mother goddesses within these circles.

Venturesome men who know the right mantras for laying ghosts sometimes try and get control over spirits on this night and go alone to the burning grounds. There they make a circle, either with cold iron or with water and sit carefully within its bounds keeping some pulse of a special kind (Phaseolus radiatus) near them.

All sorts of ghosts, ghouls, demons, fiends, and witches attack the man. If they come too near, he throws the pulse at them, and this frightens them off; and as long as he keeps a brave heart and repeats the right mantras 108 times without stumbling, all goes well, and he is their absolute master for the ensuing year; but if he steps outside the circle before the day dawns, or if for one moment during the terrible ordeal his heart fails him and he blenches, or if he stumbles as he repeats a mantra, he is in the fiends' power for ever.

Other Indians, such as Kolis, Bhils, and the low-castes go down on this night to the desolate places where corpses are burnt and making similar circles, burn within them as sacrifices to terrible mother goddesses, such as Mahākāli or Bhairavi, or Meladi, offerings of evil forbidden food, spirits and meat and give them a Sarl of ceremony and bangles to wear.

If inspite of all her fears, a woman has to go outside her house on this terrifying night, she walks very carefully, for there are circles drawn in every street and if she so much as put her foot inside one, an evil spirit will take possession of her. If, by some mischance, this terrible catastrophe does happen to her, she knows it, and so do her friends, by her constant shaking. Sometimes the woman herself says who the ghost is, how it came, and how to get rid of it. The last day of the three is the greatest of all the Divali days. In the morning children get up early, bathe as soon as they are dressed, and let off crackers to their heart's content. The children have had a fine time all three days, for their elders believe that, if the children are indulged and kept happy in every possible way, the year will bring good fortune to both parents and children, you may be sure, make the most of so congenial a creed!

On this last day they take a cake of cow-dung, thrust in it a piece of sugar-cane for a holder and arrange on the cow-dung a tiny earthen lamp, in which a wick floating on sweet oil is kept burning. Carrying this light (Guj. Meriyum) the children go round from house to house begging oil for their lamp, that their dead ancestors may get light.

Their elders spend the morning in meeting and entertaining their friends and preparing for what is the main ceremony of the three days, holiday, the Worship of the Account-books, by putting bigger lamps than ever in the windows of their houses, for this night the illuminations must be "gorgeous and grand." All the old accounts must be closed and the new ones opened, in preparation for the worship.

The astrologer fixed the exact moment for this all important rite to be performed.

The new account book is opened and on its third leaf a Brähman writes the word Sri (i. e. Lakşmi, the goddess of wealth) over and over again in such a way as to form a pyramid of the syllable Sri.

In the centre of this pyramid a betel-leaf is placed, and on it a current rupee, the newer the better.

The five-fold worship is offered by the presiding Brahman to the account-book still open at this page, concluding with *drati*, and at the end the food offered is distributed to visitors and alms are given to the Brahman, who in turn blesses his host, saying; May you be happy all the year."

Then as an omen, the rupee from the account-book is tossed up, and if it falls with a clear ringing sound, it is a lucky presage for the new year.

Afterwards every one gathers round to eat sugar and grain, sends trays of it to friends and lets off crackers.

The account-book is kept open all night with a lamp burning beside it, and early in the morning the Brāhman returns. His host says to him three times: "Lakşa Lābha" (a hundred thousand profits) and the

Brahman replies: May you have a hundred and twenty-five thousand profits" and shuts the account-book.

All night long every one in the house has kept awake and with the dawning of the new year they sally forth to wish their friends all happiness."

My object in reproducing the above description of the Divall in extenso is two-fold: Firstly it will enable my readers to compare it with the descriptions of the Divall, as current in the other regions of India and greater India, which may not have come under the direct observation of Mrs. Stevenson; Secondly it will enable research scholars to see if any of the features of the Divall celebration mentioned in this description have any early history for them and whether such history can be proved on documentary evidence of Sanskrit and non-Sanskrit sources. In studies pertaining to the culture of any nation the details of any feature of this culture are most important and need to be recorded with meticulous care so that they may give us as comprehensive a picture of this culture as possible on the strength of present observation and past history, backed up by historical sources pertaining to different regions and periods. Every modern feature may not have any long history for it but it is possible to trace the history of some essential features of a festival to ancient times.

We have recorded the descriptions of the Hindu and the Jain Divall so far. Now let us record a description of the Divati as observed in Greater India by people with Buddhist persuasion. In this connection some interesting information is found in the account of Siamese Festivals and Fasts by G. E. Gerini (Vide pp. 885-890 of Ency. of Reli. and Ethics, Vol. V) who informs us that Siamese festivals are traceable, as a rule, to either Brahmanism or Buddhism. These two creeds were introduced into Siam at a very early date and consequently Brahmanic and Buddhist rites were introduced into most of the national festivals and ceremonies. Speaking of the festivals observed in Siam in the month of Karttika Mr. Gerini notes (1) the Feasts of lamps which is a counterpart of Hindu Divali or Dipavali and (2) the Karttikeya Festival, which is a state ceremony recently abolished, in honour of Karttikeya (or Skanda, the Hindu Mars, son of Siva) and which is attended with the floating of lamps, and bon-fires. The Siamese Divali is described by Mr. Gerini as follows:

"No. 20. Feast of lamps (Karttika, 12th month) - This embraces two distinct festivals (1) the hoisting of lamps on poles on new-moon day and the lighting of them at night, till the second day of the waning, when they are lowered; (2) the floating of lamps in the streams at night on the 14th, 15th and 16th days of the moon, with the eventual addition of fireworks. This second form of illumination seems however, to be connected more especially with the festival hereafter explained (No. 21). On the other hand the aerial lanterns hoisted on poles, as aforesaid, are kept burning to scare away goblins as in time of epidemics (cf. e. g. the rakṣā-pradīpas, and, it is believed, also to retain the water from draining off the paddy fields, for the ears of rice would not attain maturity if the yearly inundation were to abate so early. Hence the festival is a very popular one like its counterpart the Divali or Dipāwali in India. They closely correspond although the ākāiapradīpas (lamps raised on poles in the air) are in India lighted in honour of Lakṣmī. We have here to do essentially with a festival in honour of Viṣṇu and his consort, for it is known that on the 11th day of the new moon of Kārttika the god awakes from his four months sleep, and that his victory over king Bali (Vāmana avatāra) took place at this season."

Mr. Gerini does not record any history of the Siamese festivals, hence it is difficult to say at what time the Dîvâli festival originated in Siam and continued to be observed somewhat on the lines of the Hindu Divâli. If the Siamese Divâli is a counterpart of the Hindu Divâli, its history is dependent on the history of the Hindu or Brahmanical Divâli, which we want to reconstruct in this paper.

Resuming now our reconstruction of the history of the Hindu Divali, I have to record here an interesting account of the Divali Festival as recorded in a Maratha chronicle 1 which states:—

"Mahadji Scindia (A. D. 1727-1794) informed Peshwa Savai Madhavarao (A. D. 1774-1795) as follows:—

"The Divali festival is celebrated for 4 days at Kofā, when lacs of lamps are lighted. The Raja of Kofā during these 4 days gives a display of fire-works outside the premises of his capital. It is called " बाइनी इंडा" or "Lankā of fire-works." During this display the image of Rāvaṇa is prepared and kept in the centre of the show. Images of Rākṣasas, monkeys and a big image of Hanūmān are all prepared of gunpowder. The tale of Hanūmān is then set fire to, and Hanūmān begins to fly in the air, setting

^{1.} ऐशाब्दांची बहार by Krishnaji Vinayak Sohoni, ed. by R. N. Sane, A. B. Press, Poons, 1925, Page 149 (I have rendered the pertinent extract into English from the Marathi original). The author of this Bakhar was possibly born during the reign of Penhwa Saval Madhava Rao (Vide p. 266 of मध्ययुगीन चरित्रहोंदा by S. Chitrava, Poona, 1937).

^{2.} Modern Kotal, State in Rajputana.

^{3.} Vide my super on Gune and Gun-powder in India-A. D. 1400 onwards in Sir Denison Boss Volume, ed. by P. K. Godo and S. M. Kates, pp. 117-124.

fire to various houses in this Lanka of fireworks. Such a display is given by the Raja of Kofa during the Divali Festival."

The Peshwa ordered Mahadji to give a similar display of fire-works for his entertainment. Mahadji made all preparations within 15 days and the display was carried out on a dark night before the Peshwa and his Sardars. The display took place at the foot of the Parvati hill and was witnessed by the Peshwa and his Sardars from the Parvati temple. It was a grand performance and was witnessed by the people of Poona in large numbers."

The use of fire-works in the celebration of the Divali, which is so common in India now, must have come into existence after about 1400 Å. D., when gun-powder came to be used in Indian war-fare. It is necessary to record the history of the use of fire-works in Divali celebrations prior to the Peshwa period.

In the references to Divali in the Hobson-Jobson the earliest notice of the Divali by a foreign observer is dated A. D. 1613. Let us now go backwards from this date. In the Ain-i-Akbari 1 (about A. D. 1590) there is an account of Festivals in which we find the Divali described as follows:—

"Month of Kārtika — The second, ninth, eleventh and twelfth are also festivals. The thirteenth is the Dipāli or row of lamps (Hind. Diwall). A difference occurs in the calculation of its date. According to the Suklapakṣa computation it is as above stated but by the Kṛṣṇa-pakṣa (Hind. Aghan-Nov. - Dec.) and they, therefore, hold this festival on the 15th of Kṛṣṇa-pakṣa of Kārttika. Lamps are lit as on the (Muhammadan) festival of Shāb-i-barāt. It begins on the 29th and this night is considered auspicious for dicing and many strange traditions are told regarding it. It is the greatest of the festivals re, the Vaisya caste."

Emperor Akbar "participated in the celebration of Dipāvali or Divali, the festival of lamps" (Ain, I, 216).

From the 16th century we may now go to the 15th century and see how the Hindu Divali was celebrated within the jurisdiction of the Vija-yanagar empire. In this connection Dr. B. A. Saletore has collected and recorded the following information about Festivals, Games and amusements in his volumes on Social and Political Life in Vijayanagar Empire (1934). In Vol. II (p. 387) he observes as follows:—

^{1.} Ed. by Jarrett, Vol. 11, 1894, Page 330.

^{2. &}quot;It is auspicious for all undertakings connected with commerce. "

^{8.} Vide p. 319 of Ind Histo. Quarterly, XIII (June, 1987).

" Another celebration which evoked admiration from foreign travellers was the Dipavali festival held in the month of Karttika. This commomorates the victory which Visnu scored against the Asuras and Narakasuras and since as they say it was won in the evening there is universal illumination of houses and temples in the land, 1

Conti thus describes the Dipavali festival :- " On another of these festivals they fix up within their temples, and on the outside of the roofs an innumerable number of lamps of oil of Susimanni which are kept burning day and night." 2

People gave contributions to the temples also for the celebration of these festivals. In about A. D. 1443 Govanna and Ballana sons of Sriranga Deva of Aranipura in Kadalur made a grant for the caitra festival of lights in the temple of Channakesvara according to former custom. 8 An inscription dated Saka 1443 (A. D. 1521-22) informs us that Sadāśiya Nayaka provided ghee for lamps during the festival of Tirukkaratigai to the temple of Brhadamba at Devikkapuran for the merit of the chief (svāmī) Tirumalai Nāyaka. 4 In Saka 1444 (1522-23) the daughter of Kannadiya Chief Devappudaiyar Marudarsar-Padaividil gave a gift of ghee for the same festival to the same temple. " 5

The inscriptional evidence about donations given by certain individuals for the expense of festival of lights or mere lights o in temples of specific gods and goddesses does not appear to refer to Divali festival as such. T Conti's description of Divali at Vijayanagar is, however, sufficient for our purpose.

2. Major India, p. 28; Sewell, For. Emp. p. 86.

8. E. C. V. p. 1. Hn. 89, p. 25.

4. 861 of 1912; Rangachuri, Top. List L. N. A. 162, p., 49.

5. 362 of 1912; Rangachari, föld. N. A. 163, p. 50. Read Pietro della Valle's description. 5. On p. 115 of his Puranic Records (Ducca, 1940) Dr. Hants observes ;- "The inseriptional evidences show that the gifts of lamps to shrises became popular in Southern India about the end of the 9th century A. D. [Ep. Ind. III, 1894-95, pp. 281, 284; V, 42-44 and 104-

106; VII (1902-08) 188 ff. and 188 ff. and so on JASB, LXXII (1908) 120]. 7. My friend M. M. Principal V. V. Mirashl writes to me on 23-7-1945 :-

" As for Diesii The one description that I can just now recall occurs in an inscription found in Chhattisgarh. It is not dated but another inscription of the same reign is dated V. S. / 1570 (= A. D. 1614). The inscription is not published but I have read the verse as follows:-¹¹ यस्सम्यक् प्रतिकात्तिकम्प्रतिदिने स्नात्वा ददात्याद्रा -

द्रोदानंञ्च ततः शुणोति महितं पुण्यं पुराणादिकम् । दीपानामपि स्थानश्चवफलपाप्ये प्रवच्छायसी

वर्गाया निकटे महानयमतः श्री बाहरकमापतिः ॥ "

I am thankful to Prin. Mirashi for this valuable inscriptional reference.

^{1,} Sri Kantaliyar, J.A. XX, p. 430; Suryanarayan Bao, The City, p. 11. For an account of the Dipseals Festival. Wilson, Id. XXVI, p. 808; Gupte, Id. XXXII, pp. 287-289.

Students of the history of Indian art may be in a position to point out the representations of the Divāli festival in sculpture or painting. I may, however, record here one such representation of the Jain Divāli. It is found in the Miniature Paintings 1 of the Jaina Kalpasūtra executed in the Early Western Indian style, published by Norman Brown (Washington, 1934), p. 40, Plate 25. Brown describes this painting as follows:—

"Fig. 54 (Heeramaneek Galleries, Newyork-MS of Kalpasütra and Kālakācāryakathā with 87 miniatures, not dated—Probably 16th Century)—The Festival of Lights. KS, 128 (Jacobi: Jaina Sūtras, S. B. E., Vol. 22, Oxford, 1884, p. 256). On the night when Mahāvīra died the 18 confederated kings instituted an illumination on the Poşadha which was a fast day. They said "Since the light of holy knowledge is gone, let us make a material illumination.—Under a canopy are three males, probably typifying the 18 kings, holding torches. The scene bears the legend statest (festival of lights) and Jacobi (J tr. 256n) says that the Jainas celebrate the nirvāņa of Mahāvīra with a festival of lights on the New-Moon of the month of Kārttika."

Some description of the Divali as celebrated in the Deccan at Kolhapur in the 11th century is found in the story of King of Kollapura recorded by Merutunga in his Prabandha-Cintamani (Trans. by C.H. Tawney, R.A.S.B., Calcutta, 1901) p. 111. The author belonged to Vardhamanapura (Vadhama) in Gujarat and composed this book of Narratives in Samuat 1861 (= A. D. 1805). I note the following points from Merutunga's story referred to above:—

- (1) Some bards were celebrating the glory of King Siddharāja of Gujarat (A.D. 1093-1143) at the court of the Kollāpur King, who doubted this glory and required some proofs for Siddharāja's skill in magic mentioned by the bards.
- (2) The above doubt of the Kollapur King was reported to Siddharaja, who found an officer of his court ready to go to Kollapur to prove Siddharaja's skill in magic. Siddharaja gave 3 lacs of rupees to this officer, who went to Kollapur and stayed there for some days.

I had inquired of Dr. H. Gosts, Ourator. Bareda Museum, if he could point out to me any paintings representing Diesii illuminations. In reply Dr. Gosts informs me in his letter of 19-12-45:—

[&]quot;As to Dienli illustrations, I can only say that there are many Mughal ministures in the Baroda Museum abowing illuminations by many small oil Ismps, such as it is the practice at Dienli but I am not sure whether this is the only festival where this is done."

I take this opportunity of requesting other scholars to publish any information about the representations of Discali cither in painting or sculpture that may come to their notice.

(3) "When the night of the Diwall festival was near and the wives of the King of that city came to his palace in order to worship the goddess1 Mahalaksmi, that officer, having assumed the disguise of a magician, adorned with all those paraphernalis, and being accompanied by a certain Barbara who had carefully practised flying in the air, suddenly appeared on the pedestal of the goddess. He offered an oblation of gold, jewels and camphor to the goddess and distributed to the King's wives betel similarly adorned and left-there a magic garment marked with the name of King Siddha, pretending that it was a religious gift, and mounting on the back of Barbara flew up into the air and so returned as he came. When the night came to an end the King was informed by his wives of this act of the hostile monarch and being bewildered with fear he sent back that present to King Siddha by the hands of his ministers. Then that officer quickly hurried through the business of buying and selling his wares, and so on, and sent a message to his king by a swift runner, that he was not to grant an audience to those ministers until his arrival. After that he arrived there in a few days. The king, having been informed of the real state of the case took such steps to win over those ministers as occasion demanded."

Whatever be the truth of the above story it gives us a historical illustration of the association of magical performances with the Divili night, so graphically described by Mrs. Stevenson in the extract already reproduced by me. The Śliāhara kings were ruling at Kolhapur at the time of king Siddharāja of Gujarat (A. D. 1093-1143). The goddess Mahāla-kṣmi was their tutelary deity and they called themselves " औमहास्ट्योदेवी-स्टब्स्यायस्य" in their inscriptions. The Sarasvatipurāna mentions that Siddharāja installed the images of Mahālakṣmi on the bank of the Sahasralinga lake constructed by him as I have shown in my paper on Mahālakṣmi (B. I. S. Mandal Quarterly, 1942).

From Merutunga's reference to Divali at Kolhapur in his work of A. D. 1805 we go to the Marathi work Juanesvari completed in A. D. 1890 by the great Saint of Maharastra, Sri Juanesvara. In this work Divali is referred to as follows (see Juanesvari ed. by B. A. Bhide, Bombay, 1928):—

Pages 106-107— " भी अविवेकाची काजळी | फेड्नि विवेकदीप उनळी | से बोनियाँ पांडे दिवाळी | निरंतर || ५४ || "

Vide my paper on the Iconography of Mahalakami of Kolkapur (B. L.S.) Mandal Quarterly, Poots, Vol. XXIII, 1912, pp. 17-25.

Page 583- " सूर्वे अधिष्ठिली प्राची । जगा राणीय दे प्रकाशाची । तेवी बाचा श्रोतयां ज्ञानाची । दिवाळी करी ॥ १२ ॥ "

Though used in metaphors by Srl Juanesvara the above usages of the word found vividly bring to our mind the illuminations of the Divali

festival as current in the Maharastra in the 13th century.

To supplement the above reference to Divali by Jifanesvara we have a very elaborate description of the celebration of the Divali festival in the Mahanubhava text in Marathi (composed about A. D. 1250) called Lifa-Caritra (ed. by H. N. Nene) Nagpur, Part III Pürvärdha, Khanda 2, 1937) pp. 116 ff. As the passage is too long for reproduction I note some points from it below ;-

(1) This is a description of Divalt not in an aristocratic circle, but by Cakradhara, 1 the founder of the Mahanubhava sect and his Gosavi

pupils.

(2) This Divali was observed at हिवरकी (जालना).

(3) महावाई, the woman — disciple of Cakradhara, managed all the

work connected with this Divall.

(4) On the evening of the earlier day she stored sufficient water for bath of the entire party of the Gosavis, who bathed next morning, getting up at dawn for this purpose. Plenty of oil was used for rubbing the bodies before this bath by the Gosavis and other devotees of Cakradhara.

(5) After bath महादाई waved lights in a tray in front of these Gosavis and others (दोबाळणी जाली) who then took betel, and pan (तांबीळ). Dinner was given to the party by महादाई, who was helped by another lady उमाई

in this work.

(6) भारतीज was observed on the following day when महादाई acted as sister to all the Gozāvis. She prepared nice dishes for their dinner such as मोदक, आइत, लाइ, सेव etc.

The Bhau-blja day observed by the Gasavis is observed even to-day. It falls on Karttika Suddha s (dvitiya) i.e. on the day following the Divall. This festival is concerned with sisters who feast their brothers on athis day. It is called Yamadvitiya in Sanskrit and Hemadri (A. D. 1260), the contemporary of Cakradhara describes it in detail in his compendium

¹ Vide pp. 850-354 of मध्ययुगीन चरित्रकोश by S. Chitray, Peons, 1987. The flates for Cabradhara as given here are " A. D. 1194-1278. " Cabradhara founded the Mahanubhava Sect in Saler 2790 (= 1268 A. D.) at Postphan, after having embraced Sassyllas.

called the Caturvarga-Cintāmaņi. This description is contained in an extract from the Bhavişyottara Purāņa quoted by Hemādrī. The practices prescribed in the extract are current at present in Mahārāṣṭra.

In a Kannada Inscription of A. D. 1119 (11th May) of the reign of Calukya Tribhuvanamalla there is a reference to Dipavali day. (One) "Kāvarāja made a gift of one gadyāņa ont of the two gadyāņas which the Mahājanas used to pay him, as a present on every Dipāvali day for the service of Nilesvaradeva."

I have already recorded references to Divâli from two Marathi sources viz. the Jnaneśvari (A.D. 1290) and the Lilacaritra (c. A.D. 1250). I shall record another reference to Divâli in an astronomical work called the Jyotişaratnamālā s by Śrīpatī, which was composed about Śaka 961

1. Ed. in Bib. Indica, Calcuita, 1878—See Vrata Khanda Chap. VI, pp. 884-886.— The extract about यमिद्रितीया अस from the Bhaviggottara reads as follows: —

"कार्त्तके गुक्रपश्चस्य द्वितीयायां युधिष्ठिर । यमो यमृनया पूर्व भोजितः स्वग्रहे सदा ॥ द्वितीयायां महोत्सर्गे नारकीयाश्च तर्विताः । पापेम्योऽपि विमुक्तास्ते मुक्ताः सर्व्यनिक्त्यनात् ॥ भ्रंशिताश्चातिसंतुष्टाः स्थिताः सर्वे यहच्छ्या । तेषां महोत्सयो इत्तः यमग्रष्ट्रमुखावहः ॥ अतो यमद्वितीया सा प्रोक्ता लोके युधिष्ठिर । अस्यो निवग्रहे पापं न भोक्तव्यमतो बुधैः ॥ कोहेन भगिनी हस्तान्द्रोकत्यं पुष्टिवर्द्धनम् । दानानि च प्रदेशानि मगिनीभ्यो विद्यानतः ॥ स्वर्णार्थकारवस्त्राणि प्रवासकारमोजनैः ।"

in Revedi's book on Argans Feelicals already referred to by me the यमद्वितीया or माठवीज is described on pp. 297-298. He merely states that the story of यम and his sister वसूना is mentioned in the Puranas but does not give any seasot reference to it.

 Vide Kannada Inscriptions from the Madras Presidency (South Indian Inscriptions Texts, Vol, IX, Part I) ed. by Shamshastri and Lakshminarayana Rao, 1989, Page 195—Inscription No. 198.

See also Ept. Ind. VIII. p. 887-Yewer inscription of A. D. 1179 of the time of Sankamadeva-The date recorded gives (1) Vikarin year. (2) New Moon day of Airayaja, (3) Somarara, and (4) महापूर्व —alimaton is apparently to दोपावित according to Dr. Fleet (Vide p. 257, Kadambabaja by Prof. Mornes— दोपावित extended from अधिन कुणा १४ to सांवित श्. १.)

8. Vida मारत इतिहास संशोधक मंडळ बन्यमाला (No. 8.)—द्वितीय संमेलनवृत्त (शक्१८३६-1914, Poona)— श्रीपतीकृत मराठी ज्योतिपरलमाला (शक ९६१ सुमार) p. 66. (A. D. 1039) according to its editor the Maharastra historian, Viśvanatha Kashinatha Rajawade, who thinks that both the Sanskrit text and its Marathi commentary are the work of Śripati himself. The word factor occurs in the Marathi commentary on a Sanskrit stanza as will be seen from the following stanza:—

Page 95-- " माधे पंचद्धि कृष्णा नमस्ये च त्रयोदशी ।
तृतीया माधवे शुक्ला नवम्युले युगादवः ॥ १३ ॥ "

The commentary on this stanza reads as follows:-

" साधमासिची समावास्या दिराद्रि भाद्रपदमासचा कृष्णपक्षि त्रयोदश्च सद्रपक्षि वैसापमासि शुक्ता तृतीया : सक्षतृतीया : कार्तिक शुक्त नवसी दिवादि वितस्या : या तिथि ४ सुगादि म्हणिजे ॥ "

At present the Divali day is the 1st day of Karttika Sukla paksa, while according to Sripati (about A. D. 1030) it appears to have been celebrated before " वार्षिक मुख्य नवसी," I request the students of Indian Astronomy to throw some light on this question from the texts on Indian Astronomy.

In the Marathi poem by the Mahanubhava poet Narendra-Kavi, called the रुक्सिणी-स्थांबर । composed in Saka 1218 (A. D. 1292) we find the following references to the Divali:—

Page 90 - Description of Dearaka

" की बानंद-दिवाळियेचे तेजः। की भाकाकी जोतिचे जीळ हों कात्र। की गगनासि वाइळें मोजः पादव-प्रतापाचे " ७१२

Page 94 -- Description of Vasanta (spring-time) "की ते संभोग-सुवाची दिवाळी :

विरहिणी चेंद्रेवाळिया होति काजळी जिल-इंद्रियें हारबीति तिये वेळी : ज्ये वैराग्याचे " ७३८

Prof. Kolate has explained the metaphor in this stanza pertaining to the Divali referred to by the poet in his notes at the end of the volume. He explains the word धेरेबाळी as कोलीत or सभास on page 141 while on page 230 धेरेबाळी is explained as lamps lighted during the Divali festival on the top of a big heap of grass. 2

^{1.} Critically edited by Prof. V. B. Kolate, King Edward College, Amraoti, (अन्त प्रसान काणि, Malkapur, Beraz) 1940.

^{2. 1}bld, p. 280—6' चंडेवाळी = दिवाळीच्या दिवसांत गवताचा एक उंच भारा बांबतात आणि स्यावर दिवे सावतात.''

While explaining the above reference to fraudi Prof. Kolate has drawn our attention to the following reference to fraudi in the Judno-Svari:—

Chap. VI (Ovi \$89 - p. 135 of Bhide's edition)
''वैसे होय तिये मेळीं | मग सामरस्याचिया राउळीं |
महासुखाची दिवाळी | जगैमि दिसे || ३८९ || "

We have already pointed out two references to द्वाळी in Jnanesvari, to which the above one may now be added.

Before I proceed to note the references to Divâli in sources earlier than those referred to above I shall record its fairly detailed description in Sanskrit given in an encyclopaedic work called the wrond takes which appears to be a reflection of the social and religious practices of the Vijayanagar Empire (between say A. D. 1450 and 1550). This is a description of a royal Divâli and hence stands in contrast with the Divâli celebrated by Cakradhara and his Gosāvis. This description reads as follows in the B. O. R. Institute MS No. 43 of 1925-26 of Sistand Gases:

Page 217- 67th Patala describing नरकचतुरेशी.

" श्री शिवः — अयान्यवाधिने सासि कर्तव्यं कर्म राजिभः ।

वश्यामि सर्वपापन्तमळ्ड्मीवितिवारकम् ॥ १॥

रूपसीभाग्यसन्तानसंपदसारस्वतप्रवत् ।

साजाज्यदं विजयदं विशेषेण महीसुजाम् ॥ २॥

सर्वशानुक्षयकरं गंगास्तानफळप्रदस् ।

अधिने सासि हृष्णायां चतुर्वश्यान्त्रपोत्तमः ॥ ३॥

वाक्षे सुदुर्त उत्याय इत्तरीचिक्षयः श्रुचिः ।

प्रश्लात्य पादावाचम्य दन्त्रधावनपूर्वकम् ॥ ॥ ॥

पुरोहितानपुरस्कृत्य समार्थान् द्वितपुंगवान् ।

क्रोक्षिदाद्वय संपूज्य वान् गंधकुसुमादिभिः ॥ ५॥

दश्वा तद्विजवर्थेम्यः तांबृक्षानि फळानि च ।

वैरागीरक्षतान् दत्तानादायांजिकना नृषः ॥ ६॥

J. Vide my paper in the Karmatak Historical Review, Vol. V (1938) Part I, pp. 7-18.

2. The Subrantishra (ed. Jivānanda Vidyānāgar, Calcutta, (1882) chap. IV deals with columnia vide and arrange for their annual festivals :--

P. 372 — " एवंविचान् नृपो राष्ट्रे देवान् संस्थापयेत् सदा । प्रतिसंवत्सरे तेषां उत्तवान् सम्यगानरेत् ॥ २०२ ॥ "

ध्स्या शिरसि चाम्यंगनिमित्तं तैलमुत्तमम् । दस्या तर्द्वित्रसुख्येभ्यो नत्या कृत्या प्रदक्षिणम् ॥ ७ ॥ पुनः प्रस्थाप्य ठान् विप्रान् तत्त्वरं पृथिवीपृतिः । हेमपीटे समासीनः प्राहमुखः प्रयतः श्रुविः ॥ ८॥ नदस्स पंचवाचेषु बाह्यकञ्चान्तरे ततः। कणरकंकणया वध्वा दरवलगदुरोजया ॥ १ ॥ सभ्यकः स्नापितो महीः कैश्चिकोच्लेन वारिणा। धृत्वा भौतांवरं दिव्यं स्वर्णतन्त्रविभताम्चलम् ॥ १० ॥ इत्येवं मनूतं स्नानं कृत्वा प्रागृद्धाइवेः । पञ्चात् सुर्योदपादस्य पुण्हं छत्वा महीपतिः ॥ ११ ॥ क्स तरकाळकर्वच्यं निस्यं निवर्धं सरपरस् । स्वेष्टरेवं समस्यस्यं गंधपुर्ध्ययंगाविधि ॥ १२ ॥ अलक्ष्मीपरिहारार्थं दस्ता दीपत्रयं नुपः। सदक्षिणं द्विवातिस्यस्तेन बीरावितः पुनः ॥ १३ ॥ सखब्रस्सशिरखाणः सर्वोभरणभूवितः । आस्थानक्टमासाच सर्वतस्समर्वज्ञतम् ॥ १४ ॥ सपुत्रपौत्रस्सामात्यः समृत्यपरिचारकः । सिंहासने समासीनः श्वेतछत्रेण चारुणा ॥ १५॥ वधृविध्यमानान्यां चामरान्यां विराजितः । भास्थानवर्तिनां राज्ञां मन्त्रिणां च पुरोधसाम् ॥ १६ ॥ सामन्तराजपुत्राणां विबुधानां विनोदिनाम् । कवीनां गायकानां च योगिनां च नियोगिनान् ॥ १७॥ नटानां नतंकानां च गणकानां हिमाहिते। तथैव गणिकानां च तत्तवुद्योगवर्तिनाम् ॥ १८॥ शिर:कम्पेन केपांचित् केपांचित्वलोकनैः। मन्द्रस्मितेन केपांचित् केपांचित् वाग्विकासतः ॥ १९॥ बालोकशब्दैः केपांचित् वेत्रपाणिसमीहितैः । संभावयन् यथायोग्यमात्मदर्शनमदिने ॥ २० ॥ मुह्तमाध्रमासीनस्तरिमन् सिंहासने नृपः। तस्परं तस्सभास्तारेरपितान्यंबराणि वे ॥ २१ ॥ ्र गम्भकुंकुमकस्त्रीतांब्छानि ययोचितम्। दापविस्वासनात् तस्मादवरक्षासयोः करी ॥ २२ ॥ अवलंदय प्रविद्यान्तःपुरं स्रीरत्नसंकुलस् । पुत्रपौत्रैः परिवृतः भुक्त्वाचमस्तोपमस् ॥ २३ ॥

ततः स्वीकृत्य तांवृत्वं अवरोधजनैस्सह । मीत्वा सरससहापैः तद्वः शेषमद्विते ॥ २४॥ ततः सेवार्थमागस्य बाह्यकक्षान्तरस्थितान् । सामन्तराजपुत्रादीन् समाहबाय तैस्सद् ॥ २५ ॥ निशास्त्रे वाणविद्यां 1 हवानाखोक्य तत्परम् । विशालो प्राप्य नुपतिनोटयश को च तैस्सह ॥ २६ ॥ नाटवं नदीभिरारदवं नानाभिनवमेज्लम् । वीणासुरजनिस्साणसुख्यवाचानिनादितम् ॥ २०॥ दृष्ट्या प्रस्थाप्य तान् सर्वान् प्रविद्यान्तःपुरन्त्रयः । प्रत्रपीत्राम्बितः श्रीमान् मुक्त्वा मधुरपूर्वकम् ॥ २८ ॥ इंसत्छीविरचितशस्यायां शयितस्सुन्तम् । क्वेन् सरसङ्खापान् महिज्या सह पार्थिवः ॥ २९॥ तद्रितानि तांव्छीद्छान्याकंवितानि वै। भाददानस्त्यासाकमानन्दानुभवी भवेत् ॥ ३० ॥ इत्येवं देवि, नरकचत्रदंश्यां नृपोक्तमः। कर्तब्यं कमें कथितं मया संप्रहतस्तव ॥ ३१ ॥

इत्याकाशभैरवाक्ये महाशेवतन्त्रे साम्राज्यपीठिकायां नरकसतुर्देशी-कर्तस्यमहोत्सवस्वरूपकथनं नाम सप्तपष्टितमः पटलः । "

Page 22 - 68th Pajala describing दीपायकी-उत्सव,

"श्री क्षिवः — जय तस्कार्तिके मासि दीपावस्यां महीसूवा । यत्कर्तस्यं पृथुश्रोणि वस्त्रामि तव सांप्रतम् ॥ १ ॥ कार्तिकस्य सिते पश्चे या तिथिः प्रतिपत् स्मृता । दीपावळीति विज्ञेया सा सबौ ग्रुभदायिनी ॥ २ ॥ तस्यां तिथी नृपः प्रातरुश्याय श्रमनाश्चिये । कृतशीचक्रियससम्बद् कृत्वा वे दस्त्रधावनम् ॥ ३ ॥

^{1.} আগ্রিয়া means here display of Firequeries. Abdur Ramk who stayed in Vijayanagar from April 1448 to 5th December 1448 mentions the use of psyclechny or fire-works at the महानयमी festival (See Elliot: History of India, IV, pp. 117-118). The promut reference to আগ্রিয়া at Dividi festival is important as it is one of the earliest references in Sanskrit sources referring to the use of fire-works at Hindu festivals. In the সামায়ন্ত্রমান্ত্রমা there is a reference to guess on folio 189 as follows:—

⁶⁵ अधोविंदो नालिकास्त्रं ²⁷. Here नालिका measure gun. (See also my paper on Guns and Gun-poteder in India in Sir E. Denison Ross Volume, pp. 117-124).

नित्यक्म विनिर्वस्यं तत्कालीचितमहिने । उपास्य भारकरं राजा तत्तरसंगव जागते॥ ४॥ पुरोद्वितं पुरस्कृत्य तदाशीशिविंविर्धितः। स्वेष्टदेवं हृदि ध्यायन् पीठे रतनसये शुभे ॥५॥ स्वासीनः प्राङ्मको देवि वाषघोषपुरस्सरम् । अभ्यक्ती गम्धतेलम स्नापितः कोव्यवारिया ॥ ६ ॥ धीतांबरधरः कालदेशे छत्योध्वंपुण्डकम् । निवर्श नित्यकमांध तत् कालोचितमद्रिजे ॥ ७॥ स्वष्टदेवं समाराध्य गम्बपुष्पाञ्चवादिभिः। अलक्ष्मीपरिद्वारार्धं लक्ष्म्यात्र स्थैर्थसिख्ये ॥ ८॥ ळडमीनारायणधीरये दस्ता दीवत्रयं नृदः। सद्क्षिणाद्विजाविम्यस्तेन नीराजितः पुनः ॥ ९॥ सपुत्रपीवस्सामात्यः सर्वाभरणमृषितः । बास्थानशासामासाच राजामास्थानवार्तनाम् ॥ १०॥ सर्वेषां दर्शनं दत्वा यथोचितमगारमञ्जे । गञ्चकस्तुरिकादीनि दस्वा मुमिपुरंद्रः ॥ ११ ॥ महतमाञ्चमासीनो भूपतिः कनकासने तत्परं तान्त्पवरात् प्रस्थाप्यान्तःपुरं नृपः ॥ १२ ॥ प्रविद्य देवि साम्राज्यकदमीं संयुज्य सादरम् । कान्ताजनेन कपूरवीपैनींशाजितोऽदिजे ॥ १३ ॥ भुक्तवा सहतं सुपवाऽय सार्यकाले समागते। मह्युदादिकं रप्वा तत्परं तु निशामुके ॥ १४॥ नगरे देवतागारेष्वाळयेषु सभास च । चावरेषु तु रम्येषु गोपुराष्ट्रालकेषु च ॥ १५ ॥ हर्म्य चाविरम्येष सीधेव्यत्यस्तेषु च । विशालासु बरारोडे चन्द्रशालासु सर्वतः ॥ १६ ॥ भूपाकास्थानकृटेषु कक्ष्यासु विविधासु च । नाटवक्सालासु रम्यासु बीयीयु च विद्येषतः ॥ १७ ॥ विन्यस्य विविधान् दीपान् किंडरांस्तु कृतश्रमान् । गम्भवाम्यूळवस्त्राचैर्वदुमास्य महीपतिः ॥ १८॥ तस्सर्व दीपनिवहं श्रिये जातेति मन्त्रतः । महालक्ष्म्ये नरपतिः समर्प्यं तदनन्तरम् ॥ १९ ॥

सिंहासने स्वकीयानि भूषणानि निधाय च। जलपूर्णं स्वर्णकुंसं पहचाचीरलंकतस् ॥ २०॥ तण्डुलोपरि विन्यस्य तत्रावाद्य बाँछ अभुस् । बक्षमाणप्रकारेण ध्यायेद्राजा महाबार्छ ॥ २१॥ ध्यायेद्दलि महाकायं सर्वाभरणभूषितम् । वपसाहत देवेन्त्र वैभवं विष्णुवहासम् ॥ २२ ॥ खड्गचमेधरं स्वर्णकान्तिकान्तासमन्वितम्। शकासमास्यसहितं दैत्यदानवसेवितम् ॥ २३ ॥ एवं ध्यारवाचेयेत्सम्पक् नाममन्त्रेण तं वस्तिम् । नतः पुष्पांजळि दशात् वस्यमाणैस्त नामभिः ॥ २४ ॥ वळीन्द्रः प्रल्हाद्योत्रो विरोधनसुतस्ततः। सहेन्द्रमदंनी दानवाधीशी विष्णमक्तकः ॥ २५॥ विभवपद इत्येतेवृत्वा प्रध्यांजाळ वतः । प्रार्थेयेत्स्वाभिछपितं मन्त्रेणानेन पााथवः ॥ २६ ॥ यवा त्वं सर्वेहोकानामधियास्य सुरेखर । तथा से कुरु सीभाग्वं यावदासूतसंदलवस् ॥ २७ ॥ इति संप्राध्यं विप्रेम्यो वद्याद्वित्तानुसारतः । सुवर्णं रजतं मुक्तामणींश्र विविधानिष ॥ २८॥ भित्राष्ठवस्य सुरुवेस्यो दचाद्यंसमन्वितः । कप्रमक्लेस्सार्धं तांव्छानि विशेषतः ॥ २९॥ एवं कृत्वा नरपतिर्दीपावस्युरसवं प्रिये । सर्वदानेश्च यस्पुष्यं यस्पुष्यमस्त्रिलाभौरेः ॥ ३०॥ तरपुष्यं समवामोति नात्र कार्या विचारणा । एवं ते देवि कशितो दीपावल्योत्सवी महान् ॥ ३१ ॥

इत्याकाशभैरवारुवे महाशैवतस्त्रे साम्राज्यलङ्गीपीटिकायां दीपावलयुरसवस्वस्थकथनं माममध्यष्टितमः पटलः ॥ "

The two chapters reproduced above contain quite a colourful picture of the royal Divali celebrated on two days viz. (1) आवित हुणा चतुर्दशी and (2) सार्विक सुरूष प्रतिपद् . This is Divali as observed in the South of India between say A. D. 1400 and 1600. I now continue my story of Divali and come to the extreme North of India and record a short description of Divali

बायुरारोग्यविजयसंपरसारस्वतप्रदृः।

given by a Muslim writer Abdul Rahaman in an Apathramia poem called the संदेशराज्य 1 in which we find a description of the month of Karttika and the Dipavall night (जोड्डिकाइ) as follows:—

> " दितिय णिसि दीवालिय दीवय णवससिरेहसरिस करि लीवय । मंदिय भुवण तरुण जोइक्सिटि मदिलिय दिति सलाइय काक्सिटि॥ १७६॥"

Mr. Bhayani observes on p. 90 of his critical Introduction :-

"On the Dipavall night mansions were decorated with lights resembling the crescent moon. Ladies applied collyrium to their eyes (176)."

The commentary called टिप्पनक on the above passage reads as follows:
अस कार्तिकवर्णनम्— " नार्यः दीपान् नवशाशिरेखासदशान् करे गृहीत्वा निशि ददन्ति ।

तज्जोतिकौः दोपैः सुवनानि सण्डितानि । अन्यस नार्थः तेषां दीपानां कजलं शलाकवा
कृत्वा नेत्रेषु ददन्ति ॥ १७६ ॥ "

Illumination of houses on the Divati night by Hindu ladies is aptly described by this Muslim writer who belonged to Multan 2 (महत्वाज) in the Punjab. He was well versed in Sanskrit, Prakrit and Apabhraméa. He must have mastered these languages at some seat of Hindu Culture (perhaps it was Multan).

From the above description of Divall in the Punjab of c. A. D. 1150 we now go to Alberuni's description of Divali of c. A. D. 1030. In Alberuni's remarks 3 " on the Festivals and Festive days " of the Hindus he describes the Divali festival as follows:—

"Ist Kārtika or new moon's day, when the sun marches in Libra is called Divāli. Then people bathe, dress festively, make presents to each other of betel leaves and areca nuts; they ride to the temples to give alms and play merrily with each other till noon. In the night they light a great number of lamps in every place so that the air is perfectly clear. The cause of this festival is that Laksmi the wife of Vāsudeva once a year on

^{1.} Ed. by Jinavijayaji and Bhayani, Bhāratiya Vidyābhayan, Bombay, 1945, page 71. In the Preface (p. 12) Muni Jinavijayaji infars that dicelera " must have been composed during the reign of Siddharāja or Kumārapāla i. e. in the latter half of the 12th century or at the latest the first half of the 12th century of the Vikrama era."

See p. 758 of World Pictorial Gumilier by Hammerton — Multan stands on the river Chanab. It is about 190 miles S. W. of Lahore. Principal buildings are two Mahomedan Shrines and the remains of an old Hindu temple. A great trading centre (shawls and carpets.)

^{3.} Videp. 152 of Vol. II of Albertani's India, ed. by B. C. Sachan, London, -Chap, LXXVI.

this day liberates Bali, the son of Viracana, who is a prisoner in the seventh earth. Therefore, the festival is called Balirājya i. e. the principality of Bali. The Hindus maintain that this time was a time for luck in Kṛta-yuga and they are happy because the feast day in question resembles that time in the Kṛtayuga."

In our search for the lights of the Divall we have traversed a period of about 950 years and moved from the south of India to its extreme north. We stand on the threshold of antiquity at about 1000 A. D. 1 and try to see if we can cross this threshold and notice any lights of the Divall in the inner apartments of the Indian history.

About 90 years before Alberuni's description of the Hindu Divali in North India we find a brilliant poetic description of Divali in the Vasastilaka campā of Somadevasūri composed in Śaka 881 (A. D. 959). About this description my friend Dr. V. Raghavan makes the following remarks in his Gleanings from Somadevasūri's Yašastilaka-campā " (p. 379 of Journal of Ganganath Jha Research Institute, May 1944 - Vol. I, part 3):-

"Pp. 597-99 (Kavyamāla 70. Bombay, 1901) — The Mahānavamī festival is followed by the Dipotsava. Houses are white-washed and decorated with white festoons; music, merry-making and gambling go on; the tops of houses are bright with rows of lights. This festival is in the Sarat season."

The text of the Divilli description reads as follows :-
" — इति विजयतैत्रायुषमागधावबोधितलङ्मी महानवमी । विषेते ।

तथा —

हंसावळी हिगुणकेतुसितांशुकथीः पद्माववंसरमणीरमणीयसारः । प्रासादसारितसुधायुतिदिक्षविको दीपोत्सवस्तव तनोतु सुदं महीश ॥ ४६२ ॥

In a Chinese poem on the Lantern Festival (of the first full moon) by Au-yang Hein (A. D. 1007-1072) we get a parallel of our Dividi (Vide p. 394 of Tien Hein Monthly, (November, 1989). I quote a starm from this poem :-

[&]quot;Last year at the Lastern Pestical
The flower-market lights were bright as day,
When the moon mounted to the tops of the willows,
Two lovers kept their tryst after the yellow dusk."

^{2.} The महानवमी festival was celebrated on a large scale during the time of the Vijayanagar Empire. It is called नवरात्र et present. It begins on आधिन गुक्र प्रतिपत् and ends on आधिन गुक्र १, followed by गुक्र १० which is विजयादशमी (दसरा), which is again followed by the Dicale on कार्तिक शुक्र प्रतिपत् (See p. 267-284) of आयोज्या समाचा इतिहास by Reveal.

चूतोनमादितकामिनीविच्यतपाणेशचाद्रकटः कीडादारविलासिनीवनभवद्भूषाविकल्पोद्धटः । कातोद्यध्वनिमङ्गलारवभरव्याकृम्भिताशामुखः प्रीति पूर्णं मनोरथस्य भवतः पुष्याध्यदीपोस्सवः ॥ ४६३ ॥

> काभान्यसर्वेशिस्तराप्रविदङ्गपालि-दीपावली चुतिभृतपुरसीधवन्थाः । प्रसाहसंगतमहीषधिदीप्तदेहा-स्त्वां सेवितुं कुलनगा हव दत्तवाताः ॥ ४६४ ॥

इति स्नास्कस्चितावसरां दीपोत्सवश्चियं चानुभूष । etc. "

From the above description of Divali by a Southern writer of c. A. D. 950 we go to a Kashmirian text "not later than 6th or 7th century A. D." viz. the नीव्यवस्था in which I find the following description of Divali:—

Page 42 (Lahore Edition, 1924)-

" तथा पक्षे व्यतीते तु कर्तव्या सुक्कपुष्तिका ॥ ५०५ ॥
पञ्चद्दयां यथा विम्न तथा में गदतः शृणु ।
तस्यां दिवा न भोक्तस्यं बाकातुरजनं विना ॥ ५०६ ॥
स्यें त्वस्तमनुषाप्तं पूर्जीयत्वा करीषिणीम् ।
दीपगुक्षास्तवो देयाः देवतायतनेषु च ॥ ५०० ॥
वस्त्रेवेषापणाः सर्वे कर्तव्याक्षोपणोमताः ।
दीपमाकापरिक्षिप्ते प्रदेशे तदनन्तरम् ॥ ५०९ ॥
स्वक्रंकृतेश्व मोक्तस्यं द्विजेन्द्र नववाससा ।
सुद्धद्विश्रोद्धणैः सार्थं वंधुनिश्रानुषायिनिः ॥ ५१० ॥
ततः प्राप्ते द्वितीयेद्धि स्वनुक्तिः स्वकंकृतेः ।
कीदितव्यं तथा युतेः श्रोतव्यं गीतवादितम् ॥ ५११ ॥
विशेषवय मोक्तस्यः पूर्वोक्तस्तैवनैस्मदः ॥
विशेषवय मोक्तस्यः पूर्वोक्तस्तैवनैस्मदः ॥
विशेषवय मोक्तस्यः पूर्वोक्तस्तव्याद्वास्तरः ग्रमः ॥ ५११ ॥

^{1.} Ed. by Ramial and Zaddoo, Lahore, 1924—p. 7 of Introduction.—See also Winternitz:

History of Indian Liberature (Calcutta, 1927) Vol. L. p. 588—Kalhana (about 1168 A. D.)

draw on this Purana. He regarded it as a venerable Purana "It must be several confuries
surfice than Kalhana's work " (साजाविकार्य)).

तस्यां रात्री तु कर्तव्यं झर्यास्थानं सुझोभितः ।
गर्न्धवंश्वेरतथा धृषेः रत्नेश्चेवाभित्रकृतम् ॥ ५१३ ॥
दीपमालापरिक्षिपं तथा धृपेन धृपितस् ।
दिवतिभिश्च सिंहतः तैनेया सा निशा सबेत् ॥ ५१४ ॥
पूज्या नृतनवासीभिः सुहृत्संबंधिबाधवाः ।
बाह्मणा भृत्यवर्गाश्च चन्द्रदेव वधाविधि ॥ ५१५ ॥
इति नी० कार्तिकामायां दीपमालावर्णनम् । "

The above passage corresponds to verses 398 to 407 in the Critical Edition of the Nilamata by K. S. J. M. de Vreese published by E. J. Brill, Leiden, 1936 (pp. 36-37).

From the description of Dipamālā in the Nilamata Purāņa of Kashmir composed in the "6th or 7th century A. D." we turn to the play Nagānanda i of Šrī Harşa, who is supposed to be identical with Harşa-vardhana of Kahauj, the reputed author of two other plays viz. Ratnāvall and Priyaiaršikā, who ruled between A. D. 608 and 648. In Act IV of Nāgānanda I find a reference 2 to Divall in the following extract:—

" प्रतिहार — बहमपि महाराजविश्वावसुना समादिष्टः । यथा सुनन्द गच्छ भिन्ना-वसुं झूदि । अस्मिन् दीपप्रतिपदुत्सवं मळयवत्था जामापुश्चैतदुस्सवा-सुरूपं वर्तिकविद् प्रदीयते । तदागत्य निरूप्यतास् इति । तद्रच्छतु राजपुथीसकाक्षमार्थः । बहमपि युवराजिमित्रावसोरानयनाय गच्छामि।" (इति निष्कान्ती)

In their notes 3 on the expression " बीपप्रतिषद्भाव " the editors observe: "This seems to be a festival held on the first day of the bright fortnight of Kartika and celebrated with illuminations, our Divall." I think the cumulative effect of the history of Divall reconstructed by me so far will warrant the above identification of द्वीपप्रतिषद्भाव with our Divall festival.

^{1,} Ed. by G. B. Brahme and S. M. Paraujpe.

Ibid. pp. 61-62.
 Ibid. Notes, p. 51.

^{4.} Mr. H. N. Mehta in his Pre-Buddhist India (Bombay, 1989, pp. 854-855) deals with sports and festivals. In this connection be refers to (1) कार्तिक festival on the night of the Moon (कार्तिकी पूर्णिमा), (2) आजिन — night of Full Moon (बार्त्माणिनी कोसूदी), There is no reference in Mehta's description of these festivals to any display of lamps. (See J. L. pp. 499-500-G. 148; II, p. 872, V, pp. 212-214; and J. VI, pp. 221-222, G. 947, 949, 953 (उत्तमी उस्तमी).

All modern annotators and editors 1 of the Nagananda equate " दीवप्रतिवदुत्वन " with Divall festival but the commentary 2 of Sivarama explains the expression with the remarks : प्रतिपद सवे स्थालीपाकास्थे, I cannot say if the Divalt was known as स्वाकीपाकडरसव in ancient or mediaeval India. In this connection I note here some points about the origin of the Divall festival recorded by "Rgvedi" in his book on Aryon Festivals 3 already referred to by me. These points are briefly as follows :-

(1) The present दीपाविष्ठ महोत्सव is a unification and transformation

of three पाकवश्रत v. z. (i) पावंग, (ii) आश्रव्यती and (iii) आश्रवण,

(2) पार्वण appears to have been observed on आधिन वस ३० in ancient times as a quant in honour of the ancestors.

(B) आखुजी was observed in ancient times on the आधिन पीर्णिमा. It pertained to agriculture, the presiding deity of which was siler,

(4) आग्रयण (नवासेष्टि) was observed on मार्गशीय पीणिमा, It indicated the

closing of the Harnet.

(5) In course of time wifes was fixed upon as the first month of the विक्रम संबद् during the reign of विक्रमादित्य, the founder of this era. The custom of celebrating the Divall in this month in association with the other festivities of the New year's beginning must have given the Divali its present form.

The above hypothesis about the origin and development of the modern Divall festival needs to be substantiated by evidence. Its author has not recorded any convincing evidence in its support to compel our

acceptance of it.

Our story of Divdii as revealed by datable literary evidence has so far come to c. A. D. 600. If the दीपप्रतिपदुःसद mentioned in the Nagananda definitely means the Divalit we can easily take its antiquity at least upto A. D. 500, as national festivals have always a long tradition behind them.

^{1.} Krishnashastri Chiplunkar in his Marathi translation of Naganousis (Bombay, 1865) p. 100, translates the expression " दीपप्रतिपदुस्तवे " as दिवाळीचे सणाचे दिवशी " ___ Principal B. D. Karmarkar in his Edition of Nagamander (Peona, 1919), p. 50 of Notes. observes :- " In the introductory some from the conveniation of the 45 30 and saffer we learn that red garments have to be presented for ten days after marriage according to the outstorn of the time to the bride and the bride groum and also that falled sante to make a suitable present to the newly wedded pair at the approaching Diplocit festival. "

^{2.} Ed by Ganapati Statzi, Trivandrum S. Series, 1917, page 167,

^{8.} आयोज्या सर्णाचा इतिहास, Bombay, 1916, pages 290-298.

a. My friend Mr. M. Govind Pai of Manjeshvar (South Kanara) states in a private communication that प्रतिपत् !!! "दीपप्रतिपद्ततव " clearly miars to कार्तिक हाक प्रतिपत् because (continued on the next page)

To go backwards from A. D. 500 is now a difficult task and I earnestly invite brother-scholars to point out from early sources any references to or descriptions of the *Divall* which can establish the antiquity of this national festival at least for 2000 years, if not more.

Hemacandra in his Deśināmamālā 1 (III, 43) mentions a Deśi word " अवस्ति " (= अवस्ति) and equates it with दीवाडी or दीपाडिका. If this explanation is correct we can easily take back the antiquity of Divali to the time " of Vātsyāyana's Kāmasūtra, which mentions अवस्ति in its list of festivals, as pointed out by Mr. T. N. Bay in his delightful article on " The Indoor and out-door Games of Ancient India" (Vide p. 244 of Proceedings of the Indian History Congress, Calcutta, 1939). Mr. Ray states that the festivals अवस्ति के अवस्ति कार्य प्रसामि के प्रदेशिकासर and सुवसन्तक are termed माहिमनी or having got a noble purpose and are universal and the rest are देश or provincial. About अवस्ति Mr. Ray 3 observes:—

"Yakşardıri is performed during the night of the New Moon Night of Karttika. [Some are of opinion that waters is the Full Moon Night of Karttika. But I don't think that they are correct. Vide the commentary by Ramacandra Sastri on Kandarpacudamani (I, 4. 42)]. This night is also called gravita. People generally gamble during this night. This is the night when the Divili festival is celebrated nowadays almost every where in India. In Bengal and in some parts of India goddess Kali is

(continued from the previous page)

of the reference to शरलाम्य in the following lines which are introduced by the post in the same somest:— नायक — मित्रावसो पश्य पश्य शरलामय-पाण्डुमि: पयोदपर्दछै: प्राष्ट्रसा: प्रालेपाचल-शिलाशिक्षममुद्रहन्ति एते मल्याचलसानव: '' [These peaks of the मल्य mountain, spread over by the valle of clouds, while on account of autumn, possess the beauty of the peaks of the Himālays (प्रालेपाचल)].

1. Ed. by Ramanujasvami in B. S. Series (B. O. R. Institute, Possa, 1988), p. 148. Example:— '' मणिवल्डपहि कुणनी जंपालेकम्मि जनस्यस्ति व ।

जण्गोहणाण वि तुमं णि सि वच्छंदेण कि डरसि ॥ ३५ ॥ "

- 2. About 100 A. D. Kelth assigns the Edmartires to C. 500 A. D. Mr. Ray scoopis the date " beginning of the Christian era" for the work.
- 8. Mr. Ray states in foot-note 16 of his article;— I have dealt with festivals in my Presidential address on the occasion of Dipsit Utsab (1846 B.S.) at Dinajpur, which is going to be published very soon, "I have not seen this address.
- The commentator Yafodhara in his Japanangala commen, on the Kamazūtra observes (p. 55 of Kamazūtra, ed. by Kedarnath, N. S. Press, Bombay, 1900);—
 - '' यक्षरात्रिसिते । सुकरात्रिः । यक्षाणां तत्र सन्नियानात् । तत्र प्रापक्षो लोकस्य वृतकीडा । एता माहिमान्यः कीडाः । देश्या आह—सहकारमञ्जिका'' etc.

worshipped during the night. The New Moon and Full Moon Nights are specially fixed for the worship of Kall and Lakşml, the goddess of wealth. The Divall festival is performed in honour of this goddess in most parts of India. The day following this night is called quadaq which is the first day of the Indian calendar of the Vikrama era. Yakşarātri is the last night of the year. It is said that Ball, the king of the nether world ascended the throne on this day."

Hemacandra's equation : " जखरची (यक्षरात्रि) = दीवाळी or दीपाळका" is a good starting point to hunt up the history of the Divall in sources on either side of the Christian era, especially because the Kāmasūtra mentions the यक्षरात्रि among three major festivals (मादिमान्य: explained by Yaśodhara as " महिमा महत्त्वं विद्वयते यादाम् "). If more evidence can be gathered about the यक्षरात्रि festival, we shall be in a position to clarify the problem of the origin of Divall.

At the beginning of his article on Games referred to above Mr. Ray observes:-

"It is not possible to give a chronological account of these games. There are certain games still prevalent in India, which can be traced as far back as the Buddhist, Epic, and even the Vedic period. So we shall arrange the games according to their nature and shall try to give their history as far as practicable."

I am firmly convinced that without a chronological account of our festivals we cannot understand their history. In the present paper I have planted some mile-stones of the chronology of Divili from about A. D. 100 to A. D. 1945 as will be seen from the following tabular statement:—

Chronology	Reference D = Divâli	Time indicated
Between A. D. 50 and 400	कामसूत्र mentions यक्षरात्रि as an impor- tant festival-According to Hemacandra जनसरती (यक्षरात्रि) is equal to दीवाडी or दीपाडिका — यदोचर (on कामसूत्र) explains यक्षरात्रि as सुखरात्रि, attended with यज्ञ and सुतक्षीचा, He calls it a माहिमनी festi- val as opposed to देइय. Both these terms are mentioned by the कामसूत्र,	The कामसूत्र gives its list of festivals as पक्षराधि, कीसुरीजागर, सुवसन्त्रक etc. Is any chronological order intended in this list?

Chronology	Reference D = Divaii	Time indicated
A. D. 606-648	Sri Harsa of Kananj refers to दोषप्रिक पहुलां in his play नागानन्द which is equal to modern D as it has a reference to सरस्मण mentioned in the same con- text—The custom of presenting gar- ments to the bride and bride-groom at this festival referred to in नागानन्द has its parallel in the modern custom of hono- nring the son-in-law with feast and presents on the first D after marriage,	विवयं भी शरस्समय.
Between A. D. 500 and 800	वीस्त्रवपुराण composed in Kashmir describes in detail the दीपमाला festival with the following features:— (1) Allround illuminations, (2) hoisting up of festoons, (3) Feasting with Brahmins, relatives and dependents, (4) Gambling, Music, (5) Passing the night in the company of ladies, (6) Wearing of rich apparel and jewels, (7) Presenting new garments to friends, relatives, Brahmins and the servants.	पञ्चद्ञी — " कार्तिक जमायां चीपमाला वर्णनम्" according to colo- phon.
A. D. 1030	सोमदेवस्ति in his यसस्तिक्ष्यंत् composed during the reign of the राष्ट्रक्ट King कृष्ण (III) of मान्यसेट (Mālkhed) describes दीपोत्सव with the following features:— (1) Houses, white-washed and decorated with white festoons, (2) Merry—making in the company of ladies, (8) Music, (4) Gambling, (5) Tops of houses bright with rows of lights, (6) Indicated by स्वास्त (" स्वास्त्रस्थितावसरो दीपोत्सवध्ये.") The astronomer अपिति refers to दिवाळी	Performed after the महानवमी festival (सहातवमी निवंत्ये).
A. D. 1030	in his Marathi commentary on his own ज्योतिषरस्मासा	Prior to आतंक श्रुक्तवमी,

Chronology	Reference D = Diväli	Time indicated
A. D. 1030	Alberuni in his "Enquiry into India"	" 1st Kartika of
n. D. 1000	(Tahkik-i-Hind) gives a detailed	New Moon's day
	description of D with the following	when the Sun
	features :- (1) name "Dibali", (2) Fes-	marches in Libra."
	tive dress, (8) Making presents of betel	
	leaves and areca nuts, (4) Merry-mak-	
	ing, (5) visiting temples and giving	THE PARTY IS NOT THE PARTY IN T
	alms, (6) All-round display of lamps	
	at night, (7) cause of D given as the	ALL A
	liberation of Bali on this day by Lak-	100
	şml, wife of Vasudeva, (8) a time for	-D
	luck-Alberant entered India in the	And the second
	train of Mahmud of Gazni.	AND THE REAL PROPERTY.
1 To 1000 1100	हेमचन्द्र of Gujarat refers in his देशी-	
A.D. 1088-1172	नाममाला to "जक्तरची" (यक्षरात्रि) and	
	नाममाला to जनवर्ग (नकाम)	
ewin live on	equates it with दीवाली or दीपालिका.	
Before A. D.	जिकाण्डलेय of पुरुषोत्तमदेव mentions यक्ष-	0
1159	राखि = दीपाळी (1. 1. 108) (see बझरात्रि in	- 11 m
	St. Petersburgh Sans. Worterbuch)	Anna Carren
A.D. 1100-1200	Abdul Rahman of Multan in the	भारत Season—
	Punjab in his Apabhramsa work सर्भ	कार्तिक वणन.
	THE describes the Dipavali night	
	(जोड्डिकिंदि) with the following features:-	E
	(1) Illumination of mansions by ladies	THE STATE
	all-round.	
	(2) Ladies applying the collyrium	100
	(2) Hadies applying the	Birth on Salar
	of these lamps to their eyes. (3) Resemblance of the Divali lamps	
2500 65	(3) Resemblance of the Division	
***********	to the crescent moon. A Kannada inscription of the Madras	New Moon day of
A. D. 1119	A Kannada inscription of the Mulius	अवयुज, सोमवार called
	Presidency of the reign of Calukya	manager and the The
	Tribhuvanamalla refers to a gift of	Flast recards as Fly
	one gadydna for the service of नीलंबर देव	afs (which extended
	by one Kavaraja on a sure, New	from आधान मुख्य १३
	Moon day of अधयुत्र, मोमवार,	to कार्तिक ग्रह १).

Chronology	Reference D = Divail	Time indicated
A. D. 1290	The Mahārāṣṭra Saint जानेबर refers to दिवादी in his जानेबरी in three differ- ent metaphors— The illuminations of the Diväll are compared to the light of spiritual knowledge.	2, 1010 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
o. A. D. 1250	In the Marathi Mahanubhava text shouters a long description is given about the celebration of Divall by usus, the founder of this sect and his Gosavi pupils. Features of this description are:—	
	(1) Plenty of water stored and used for the Divali bath, taken by the Gosdvis.	The same of
	(2) Use of oil for rubbing the bodies before this bath,	
	(3) Waving of lights (নীবান্তলী) before the Gosavis by the woman-disciple of বছৰে.	15 15 40 miles 2017
	(4) Preparation of choice dishes for dinner such as मोदक, खाहू, सेव etc. on the भाउनीय (यसदितीया) day following the Divail day.	III. COLLEGE
	This was a Saint's Divali without any merry-making of the aristocratic variety. It was quite modest and simple.	
A. D. 1260	हेमाद्रि in his चतुर्वर्गचिन्तामणि (अतस्वण्ड)	कार्तिक शुक्त द्वितीया.
Land Hold	describes the यमहितीया (or भाउतीत) festival. In this connection he quotes s	elit //
H. Sales S.	passage from भविष्योत्तर containing the story of यम and his sister यमुना, who feasted him at her house. Since that time	
I Z W	this festival was observed by brothers and sisters.	and the same of th

Chronology	Reference D = Divail	Time indicated
A. D. 1805	narrates the story of Kolhāpur king, who was contemporary of king Siddharāja of Gujarat (A. D. 1093-1148). In this connection he refers to the Divalifestival at Kolhapur with the following features:—	Divalt night
	(1) Worship of the महालहमी goddess of Kolhapur by the king's wives on the Divali night. (2) Oblation of gold jewels and camphor offered to महालहमी on the Divali night by an officer of Siddharaja. (3) Gift of a magic garment to महालहमी by the above officer.	
A. D. 1420	Nicoloi Conti, the Italian traveller who visited Vijayanagar about A. D. 1420 or 1421 has described the festivals that were celebrated at Vijayanagar such as वर्षप्रतिपदा, महानवमी, दीपावडी and होटी (Vide p. 252 of विजयनगर स्मारक ग्रंथ, B. I. S. Mandal, Poona, 1936-37, article on विजयनगर जानि परश्रीय प्रवासी by R. M. Athavale). He describes the Divilli lamps kept burning day and night within temples and on their roofs.	
Between A. D. 1450 and 1600	The बाकासभैरवक्त्य, an encyclopaedic	कार्विक सिवे पश्चे प्रतिपन् .

	It is called similar (giver of Sovereignty). (2) Early morning bath, (3) Worship of Purchitas and other eminent Brahmins. (4) At the bath the king's wife	SOLE G
	of Purohitas and other eminent Brahmins. (4) At the bath the king's wife	Alleria
	(4) At the bath the king's wife	elitti
- 0	should anoint him with oil and mallas	
	(wrestlers) should bathe him with warm water. This is called # ** ********************************	
	(5) King should worship his special deity and light three lamps before it.	100
	(6) Then he should go to the susuance assembly hall) duly attired with	
	on the royal throne (विद्यासन) with all	
1	nis servants and officers in attend- ince. He should receive here the	0043-42
t t	nembers of the assembly consisting of ributary princes, learned Brahmins,	
6	cets, singers, actors, dancers, astrolog- rs, and courtezans. This reception	
e	hould be according to the status of ach class of the assembly. The King	
10	hould then distribute presents in the orm of garments. The distribution of	
to the	amballa etc. should bring the function on close.	120
AND PROPERTY OF	(7) The King should then go to the company of beau- ful ladies, his sons and grand-sons	TOTAL SHOP
e	to. finish his dinner.	
ir	(8) In the evening he should witness, the company of tributary princes etc.	
01	display of बाजरिया (fire-works) foll- wed by a dramatic performance in the क्ष्माका accompanied with singing etc.	

Chronology	Reference D = Divali	Time indicated
	(9) He should then retire to the अन्त:पुर, take his meals with the members of the house-hold and later pass the night in the company of his chief queen (महिनो).	771.77
	The features of the दीपावली proper on the following day (कार्तिक शुक्ल प्रतिपद्) are :—	101
	(1) Bath etc. as on the previous day. (2) Worship of meet (Sun).	
	(3) Offering three lamps to छड्मी- नारायण for averting अछड्मी and establi- shing छड्मी on a secure basis (स्थैयंसिड्से).	
	(4) Holding a gathering in the আন্থা- লক্ত as on the previous day.	
	(5) Retiring to अन्त:पुर and there worshipping सामाज्यकक्षी. (6) After-noon rest, followed by	
	entertainments like ange. (7) Illuminations all-round in the capital in temples, assembly-halls, terraces streets and squares, theatres etc.	
	(৪) Honouring the royal servants with tāmbūla and garments after their labours (ভুৱজনাৰ) for the success of the	THE PARTY OF THE P
al large or	Divall celebrations. (9) Dedication of the entire illumi- nations (दीपनियद्) to महाळद्मी.	Access to the last
Total Control	(10) Worship of बढी, son of विरोधन and grandson of प्रवृहाद.	
-	(11) Distribution of gifts of gold etc. to Brahmins, relatives etc. with a joy- ous heart.	Just terbeiline

Chronology	Reference D = Divali	Time indicated
	Thus terminates the दीपावडी-इस्सव contributing to long life, health, vic- tory, prosperity and knowledge.	
A. D. 1590	Ain-i-Akbari of Abul Fazi describes Divall. Features:—(1) Greatest festival of the Vaisya caste, (2) Illuminations-difference in calculating the date of D.—celebrated on wife uses (3 and gen (4, (3) Lamps are lit as on the Muslim festival Shab-i-barat, (4) Dicing and other strange traditions.	Karttika हुव्यापक्ष ३५ and बुक्तपक्ष ३३.
A.D. 1613, 1623 1651, 1671, 1678, 1690, 1820, 1843, 1883.	European references to Divall recorded in Hobson-Jobson. Features:-(1) Feasting, (2) Festival in honour of fam, (3) Sending presents to all concerned, (4) Bania's Divall, (5) Grand festival season, (6) Fireworks (1820), (7) Worship of early, (8) Floating of lamps in river, (9) Splendid Divall at Benares (1888).	

In the foregoing study of the history of the Divall festival I have confined my evidence as far as possible to non-Puranic sources, as the chronology of the Puranic sources is not definite. I hope now that many of my friends who have made a close study of the Puranic sources will throw more light on this festival of lights by linking up the Puranic sources with the chronology of this festival as recorded in the present paper for a period of about 2000 years from the beginning of the Christian era up to the present day. 1

^{1.} Since this paper was drafted I have sent for publication in the Journal of the Dr. Ganga-natha Jha Research Institute. Allahabad, a paper on "The Subhamptikh of the Milamata Purk-pa (between A. D. 500 and 800) and the Aditya Purkpa quotes by Hembilei (c. A. D. 1260) and its relation to the modern dickle festical"—I have further received the following replies to my inquiries about Divall, which would be useful for further investigation in this field:—

My present study of the history of the Divall has been prepared in space-time context. The time-context has been made sufficiently clear in the table given above. As regards the space-context I may observe that the sources used in the present study pertain to the celebration of the Divall from Kashmir to Madras at such places as Multan, Kashmir, Kanauj, Delhi, Agra, Gujarat, Chhattisgarh (C. P.), Maharastra, Poona, Malkhed (in Nizam's Dominions), Vijayanagar, etc. This space-context shows the national character of the Divall from very early times. Yośodhara, therefore, is right in putting the Yakşarātri (or Divali) in the category of Māhimanī (national) festivals mentioned by Kamasutra as distinguished from the delya (provincial or regional) festivals.

(continued from the previous page)

(I) Mm. Prof. P. V. Kane writes on 22-1-1946 :-

"The 4th volume of my work (History of Dharmaskafra) will deal with feelivals and trains. Therefore, so far I have written nothing about the Divali festival. From my notes I find that Hemadri quotes स्कृत्युराण and मोविष्युराण for lighting lamps in Dicali; similarly the मदनपारिजात quotes वृद्धमन्, the दिवोदासीय quotes ब्राह्मपुराण, The निर्णयसिन्यु also quotes these and the कुट्यरलाकर (pp. 886-895 and p. 418) has something to say about आशिनराजिमहोत्सव and यमदितीया "

(II) Dr. A. P. Karmarkar who is now working on Purante Culture at the Bharattyn Vidya Bhavan, Bombay, has kindly sent me the following references to Dipavalt from the Purapas, on 1-2-1046 :-

(1) पद्मपुराण (उत्तरखंड, chap. 122); (2) बामनपुराण (chapter 92-vernes 58 ff. -Note also the दशावतारक in the ब्रह्माण्डपुराण); (8) स्कृत्यपुराण (वैष्णव लण्ड-कार्तिकमासमाहारम्य,

chapters 9 ff.).

(III) Dr. A. N. Upadhye (Kolhapur) writes about Jain Dieals on 25-1-1945 .- " The Dieall is the most important festivity with the Jaines. Lord Mahavira attained Moksa on the कार्तिक वद्य अमा (in the South अश्विन वद्य अमा). The Jahns practically all over India celebrate the Nevana of Mahkelra by illuminating lights on the night of the New Moon in the month of Karttiles; the TEVEN remarks : "Since the light of intelligence is gone, let us make an illumination of material matter" (see S. B. E. Vol. 22, pp. 264-266). The era of HEIGHT नियोग busins from कार्रिक ग्रह रे. The remark of the करमसूत्र is the starting point for our study, "

I am thankful to all the above friends for their helpful and prompt replies to my quaries

about Dienit.

19. Studies in the History of Indian Festivals The Sukhasuptika of the Adityapurana and the Nilamatapurana (A.D. 500-800) and its Relation to the Modern Divali Festival*

In my paper on the History of the Divall Festival (c.A.D. 100-1945)1

I have pointed out the following facts:—

- (1) यक्षराजि mentioned by the Kāmasūtra as an important festival is identical with its dest name जनवर्ती mentioned by हेमचन्द्र in his Desindmamālā and explained as दीवाळी or दीवाळिका.
- (2) Another lexicographer Purusottamadeva in his lexicon विकारकोष also equates यक्षराजि with दीपाछि (see St. Petersburgh Worterbuch under यक्षराजि). This author is earlier than A.D. 1159.
- (3) बन्नोधर in his commentary Jayanangald on the Kamasütra explains बन्नराजि as सुलराजि । बन्नराजिरित । सुलराजिः । यक्षाणां तज्ञ सम्बद्धानात् । तज्ञ प्रायशो लोकस्य सुतकीदा । 2

Mr. Apte in his Sanskrit-English Dictionary explains gunds as the "night of new moon (when lamps are lighted in honour of Laksmi)," but does not record any usages of this term.

If the above explanations are correct we can form the following equation of all these terms:

वसराजि = सुलराजि (according to पक्षोचर) associated with ब्लक्षीबा and बल्लाड.

^{*} Journal of Ganginalho Jha Research Institute, Vol. III, Part 2 (1946), pp. 205-216.

L According to Krishnamschariar (P. 890 of Classical Sansbrit Literature, 1987)
Yalodhara's "gloss is later than Kokkoka (19th cent, A. D.) and cannot be earlier than the
18th century A. D. "Kokkoka is the author of the Three (18td, p. 89s).

^{9.} Mr. B. M. Khuperkar in his Marathi Translation of कामसूत्र and its Commentary by यशोधर, Bombay, 1988, p. 83, translates this passage as follows:— "कार्तिक अमादास्येच्या राजीका यक्षरात्र स्हणताल, त्या राजी यक्षांचे सांतिस्य असते. या राजीमस्ये बहुतेक लोक बूलकीबा करिताल, "

- = जनवरची according to हेमचन्त्र (A. D. 1088-1172) is equal to दीवाळी or दीपाळिका.
- =दीपाडी (according to चिकाण्डकोप—Before A. D.
- = युष्यराध्रि the night of new moon when lamps are lighted in honour of इड्झी (Apte's Dictionary).

We can visualize the दीपानकी in the above equation but the term सुकरात्रि (given as an equivalent of बद्धरात्रि by बद्धोचर with two features viz. (1) ब्रुक्तीवर or gambling and (2) बद्ध-संविधान or association with बद्धा) remains vague. Let us, therefore, see if we can find out any descriptions of this सुकरात्रि. In this connection I have to point out that Hemādri¹ records the description of a नव called सुक्युद्धिका or सुक्युद्धिका (बादिस्बपुराणीक), which in my opinion is identical with सुक्यात्रि mentioned by बद्धोचर in his commentary on the Kāmasūtra. This description reads as follows:—

Pages 348-349 — "सनत्कुमार ववाच । 2

समावास्यान्तु देवाइच कार्तिके मासि केशव ।

समयं प्राप्त सुप्तास्तु सुखा श्रीरोदसानुषु ॥ ३ ॥

छद्दमीर्देखभयान्युक्ता सुखं सुप्ता भुजोदरे ।

चतुर्भुजस्य इस्तान्ते ब्रह्मा सुप्तस्त पङ्कते ॥ २ ॥

सतोऽवं विधिवत्कार्या मनुष्यः सुखसुष्तिका ।

दिवा तत्र व भोक्तस्यमृते बाजातुरान् जनान् ॥ ३ ॥

 Vide pp. 848-849 of Cofurvargacintămani by Homadri, Vol. II (Vratakhands. Part II) Bib. Indica, Calcutta, 1879.

2. The Kashmirian नीलमतपुराण which is supposed to be "not later than 6th or 7th century A. D. " by its Editors Ramlal and Zadoo (Vide P. 7 of Intro. to नीलमत, Lahore, 1924) contains दीपमालावणन on कार्तिकामाणस्था or मुख्यमुसिका, which reads as follows:—
Page 49 (Verses 505-515) —:

"तथा पक्षे व्यतीते तु क्लंब्या मुलनुप्तिका ॥ ५०५ ॥
पञ्चद्द्रयां यथा विप्र तथा मे गदतः शृणु ।
तस्यां दिवा न भोक्तव्यं बालातुरवने विना ॥ ५०६ ॥
सूर्ये त्वस्तनुप्राप्ते पूक्षित्या क्रांपिणीम् ।
दीपश्चक्षास्ततो देयाः देवतापतनेपु च ॥ ५०७ ॥
बतुष्यथद्मशानेपु नदीपर्वतंत्रेश्मम् ।
बृक्षमृत्येषु गोष्ठेपु बत्वरेष्वापणेषु च ॥ ५०८ ॥

प्रदोषसमये लक्ष्मी प्राधित्या ततः क्रमात्।
वीपमुक्षाश्च दातस्या प्रकर्णा देवगृहेषु च ॥ ४॥
चतुष्पये इमशानेषु नदीपस्यंतवेदमसु ।
बक्षम्लेषु गोष्ठेषु चत्वरेषु गुहासु च ॥ ५॥
वक्षः पुर्णः शोभिनस्याः क्रयविक्रयभूमयः ।
दीपमालापितिक्षप्ते प्रदेशे तद्गन्तरम् ॥ ६ ॥
आक्षणाम्भोजियस्वादौ विभव्य च बुसुक्षितान् ।
जलंकृतेन भोकस्यं नववक्षोपशोभिना ॥ ७ ॥
स्निग्धेम्मुंग्धेविद्ग्येश्च बान्धविक्षिमृतैः सह ।
शङ्करस्त पुरा खूतं सक्षकं सुमनोहरम् ॥ ८ ॥
कार्तिके ग्रुक्षये तु प्रथमेऽहान सत्यवत् ।
जितश्च शङ्करस्तत्र वयं लेभे च पाव्यंती ॥ ९ ॥
अतोऽभै शङ्करस्तत्र वयं लेभे च पाव्यंती ॥ ९ ॥
अतोऽभै शङ्करस्त्य वयं लेभे च पाव्यंती ॥ ९ ॥

वस्त्रेश्चेवापणाः सर्वे कर्तव्याश्चोपयोभिताः ।

वीपमाळा परिश्चिप्ते प्रदेशे तदनन्तरम् ॥ ५०९ ॥

स्वलंकृतैश्च भोक्तव्यं द्विजेन्द्र नववाससः ।

सुद्धव्रिश्चांद्वाणैः सर्थं बन्द्वामिश्चानुवाविभिः ॥ ५१० ॥

ततः प्राप्ते द्वितीयेऽद्वि स्वनुष्ठिप्तेः स्वलंकृतैः ।

श्रीद्वतव्यं तथा युतेः श्रोत्तव्यं गीतवादितम् ॥ ५११ ॥

विशेषवत्र भोक्तवैः पूर्वोक्तस्तैः अनैस्तदः ।

तस्यां राश्री तु वस्तंव्यं श्रव्यास्थानं मुद्योभितम् ।

तस्यां राश्री तु वस्तंव्यं श्रव्यास्थानं मुद्योभितम् ।

योपमाळापरिक्षितं तथा धूपेन धूपितम् ।

दिवताभिश्च सद्दितैः तैनेवा सा निशा भवेत् ॥ ५१४ ॥

पूज्या नृतनवासीभः सुद्धत्यंत्रीव्याधवाः ।

श्राद्याणामृत्यवर्गाश्च वन्द्रदेव यथाविष्व ॥ ५१५ ॥

इति नी॰ कार्तिकामायां दोषमाळावर्णसम् "

The above passage corresponds to verms 398 to 407 in the Critical Edition of Nilamaia (pp. 36-37) by K. S. J. M. de Vreeze, Leiden), E. J. Brill, 1986.

वस्मिन् भवेज्जवो यस्य तस्य संवस्सरं झुमम् ।
पराजये विरुद्धन्तु लब्धनाशस्त्रतो भवेत् ॥ ११ ॥
श्रोतस्यं गीतवाशादि स्वनुलिप्तः स्वस्रङ्कृतैः ।
विशेषवस्य भोक्तस्यं प्रशस्तैयान्धवस्सद्य ॥ १२ ॥
तस्यो निशायां कर्तस्यं शस्त्रास्थानं सुशोभनम् ।
गन्त्रपुष्पेस्त्या वस्तः स्त्रेन्मांव्येरलंकृतम् ॥ १३ ॥
दीपमालापरिक्षिप्तं तथा धूपेन धूपितम् ।
दिवताभित्र सद्दितेनया सा च भवेशिशा ॥ १४ ॥
नवैवैद्या संपूज्य द्विजसम्बन्धियान्ध्रवान् ।

इत्यादित्यपुराणोकं सुलसुप्तिवतम्।"

The foregoing description of gasgin or gasgins quoted as an extract from the Aditya-Purana by Hemadri (c. A. D. 1260) is practically identical with the figures of (or gasgins and) found in the Kashmirian Nilumatapurana which is considered "not later than 6th or 7th century A. D." "The historian Kalhana (about 1148 A. D.) drew on the Nilamata in his Rajatarangini for the ancient history of Kashmir and he regarded it as a venerable Purana. It must therefore, be several centuries earlier than Kalhana's work "—says Dr. Winternitz. 2

Hemādri states the source of his extract on सुखमुखित viz. आदित्यपुराण but no such statement has been made by the author of the शिक्षमवपुराण. Presuming that the आदिव्यपुराण is earlier than the शिक्षमवपुराण it is possible to suppose that the शिक्षमव has borrowed the extract from the आदित्यपुराण which is mentioned by Alberuni (c. A. D. 1030) in his list of Purdinas. Even if this supposition is not accepted we are justified in inferring that the सुखसुश्चित्राव and the practice of observing it on the New Moon day of the month of Kārtika (आविक-अमाबादया) was current say between A. D. 500 and 800.

^{1.} This identity is not marely in respect of the contents of the extracts from the SHERRYUN and ASSIGNATION but there is verbal parallelism with slight variations as will be seen from a comparison of the two extracts quoted one below the other.

^{2.} Vide p. 583 of History of Indian Literature, Vol. I. Calcutta, 1927. Kalhana calls the work नीकमत (राजतर्राक्षणी I. 14: 16) or नीलपुराण (1. c. I., 178). The Pandits of Kashmir usually call it नीलमतपुराण,

^{3.} Vide p. 90 of Purapic Records by Dr. Harra, Daces, 1940.

The features of this सुजानुक्षिकावत as revealed by the extract quoted by Hemadri and that from the नीडवर्गण are as follows:—

- (1) This vrata is to be observed on कार्तिक अमाबास्या.
- (2) लक्षी or करीपिणी (the goddess of wealth) is to be worshipped after sun-set (प्रदोषसमये, स्वेतु जस्तमनुप्राप्ते).
- (8) All persons, except children and sick persons, should observe fast by daytime.
- (4) After 表現代表明 lamps should be lighted all round in temples, cross-roads, cemeteries, on mountains, rivers and on houses, at the foot of trees, in cow-sheds, in caves etc.
 - (5) Market-places should be adorned with festoons and flowers.
- (6) At a place illuminated with rows of lamps, food should be distributed to the hungry and Brahmins should be entertained with a dinner, along with all classes of one's relatives and dependents. On this occasion one should wear ornaments and new garments.
 - (7) On the 1st day of कार्यक-जुक्छपन्न God शंकर was defeated by पार्थनी in a dice-play (यून), hence he was in a sorry mood on this day while पार्थनी or उसा his consort was in a pleased mood. All people, therefore, indulge in यून early in the morning on this day. Those who win in this यून will have a prosperous year, while those who lose will suffer much loss. One should hear music of all sorts and dine with all one's relatives.
 - (8) On that night a fine bed should be prepared, decorated with different cloths, jewels and gariands and perfumed with scents and flowers. One should pass this night on this bed in the company of one's wives with rows of lamps on all sides and with incense burning.
- (9) On this night all one's friends, relatives and kinsmen as also Brahmins and servants should be honoured with the gifts of new garments.

The time-table of the gauge celebration as found in the passage from suffequive quoted by Hemadri (A.D. 1250) may be represented as follows in relation to the time-table of modern Divail:—

^{1.} The नीलमतपुराण does not refer to this date. It merely states " दितीयेऽहि." The atoxy of शंकर playing यूत with पार्वती on कार्तिक गुरू प्रतिपत् is also not mentioned by the नीलमत-पुराण.

Mo	nth	Pakṣa	Day	Particulars of Observances
Description of the last of the	(आश्विन	Foot	4.5	धनवयोदशी— First day of modern Divall
	Do.	Do.	\$x	नरकचतुर्देशी— Second day of modern Divali
1945 (Deccan)	Do.	Do.	रूप समावास्या	लक्ष्मीपुत्रम—Third day of modern Divali
(2000	कार्तिक	32	- 2	बल्डिप्रतिपदा - Fourth day
	Do.	Do.	3,1	यमद्वितीया or माऊबीज Fifth day of Divall
Between A. D. 500 and 1000 A.D. (North India)	कार्विक	Ecol.	१५ अमाबास्या	डड्मीपूजन - Observance of सुखसुडिकानत - Illuminations all round-Feasting at night but fast by day-Gifts of new garments to all.
and नीलमतपुराण	Do.	9.5	(ध्रयमे बहुनि of कार्तिक छुक्छपक्ष)	सूत of शंकर and पार्वती — Men should play सूत on this day — Feasting with relatives, music, etc.

It will be seen from the above table that the मुख्युविका of the कादित्वपुराण and the बोडमबपुराण which was celebrated on कार्थिक अमावास्था more than
a thousand years ago in North India is now celebrated on आधित अमावास्था
in the Deccan. The features of the मुख्युविका are practically identical with
those of the modern Divall celebrations on आधित अमावास्था including the
क्रमीपुजन. We can, therefore, equate मुख्युविका with दीवाडी or दीपाडिका. The
problem of the genesis and development of Divall is a very complicated
one but the following equation of different terms for Divall may be helpful
towards its clarification:—

यक्षरात्रि =	सुखराति =	सुसमुक्षिका	जक्त्ररची (बक्तराजि)	= दीपाली
Between c. A. D. 100 and 400		Between A. D. 500 and 800	A.D. 1088 — 1172	Between 1100 and 1159
(कामस्य)	वशोधर on कामसूत्र	नीळमतपुराण and आदित्यपुराण	देमचन्द्र in देशीनाम- माला	विकाण्डवेष of पुरुषोत्तमदेव

Now as regards the apparent shifting of the date of अइमीपूजन day from कार्तिक अमाबाद्या in the time of the Adityapurana and the Nilamata-purana to जान्तिन अमाबाद्या now current in the Deccan, I have to point out that this shifting is only apparent and not real. In this connection Mr. S. B. Dikshit 1 states that the system of computation of months is पूर्वमान्त to the north of Narmada river, while it is अमान्त to the south of Narmada. In accordance with this explanation we get the following equation of the two days pertaining to भुजापुत्रका or Divall.

अमान्त	पोणिमान्व
To the South of Narmada	To the North of Narmadā
आधिन - कृष्ण १५ (अमावास्या)	= कार्तिक - कृष्ण १५ (अमावास्था)
कार्तिक - शुक्ल १ (प्रतिपद्)	= कार्तिक-शुक्छ १

It will thus be seen that the dates for celebrating the सुलमुद्धिश more than a thousand years ago correspond exactly to the अवसीपूजन day and the बल्पियाया day of our modern Divali. Secondly all the features of the सुलसु- क्षिका in respect of joyous ritual and merry-making closely agree with the current features of Divali celebrations on आधिन असायास्या and कार्तिक सुक्छ प्रतिपत् or बल्पियाया. We may, therefore, conclude that this मुख्युद्धिश of the

Vide pp. 892-898 of History of Indian Astronomy (in Marathi) by S. B. Dikshit, Poots, 1896. I am thankful to Prof. N. A. Gore of the S. P. College, Poots, for drawing my attention to these pages.

कादित्यपुराण is identical with सुखरात्र (with धृत etc.) equated by बक्षोचर with बक्षरात्र of the Kamasatra (c. A. D. 100—300).

The Adityapurana or at any rate the passage in it about सुखसुद्धिका appears to have been composed in North India where the पीर्शिमान्त computation of months was current. The Nilamata Purana was definitely compiled in Kashmir and consequently the पीर्शिमान्त computation followed in it can be easily understood.

We now require more descriptive particulars of पक्षाचि as such from early sources preferably before A. D. 500. In a late lexicon of A. D. 1660 vis., the Kalpadrukośa of Keśava (G. O. series, Baroda, Vol. I. p. 411) I find the following line containing the word चक्राविद which is identical with पक्राविद

" सिनीवास्त्रय दीपाली यक्षनिड् वलिपवे च "

Mr. Apte in his Sanskrit-English Dictionary gives the following explanations of some of the above terms :-

विनोबाडी — The day preceding that of the new moon, or that day, on which the moon rises with a scarcely visible crescent.

दीपाडी —Particularly the festival called Divall held on the night of the new moon in आधिन,

यक्षरात्रि —the festival called दीपाली (q. v.) (यक्षनिड्=यक्षरात्रि).

Perhaps बल्लियं=बल्लिप्रतिपदा=कार्तिक ग्रुष्ट प्रतिपत्.

If the line from the Kalpadrukośa indicates several days of the modern Divali Festival we can allocate these terms to their respective days as follows:—

सिनीवाछी =नाश्विन कृष्ण १४ or नरकचतुर्देशी

दीपाली same } = बाबिन कृष्ण १५ (बमावास्या) (उदमीपूजन day)

वालिपवं =कार्तिक शुक्त १ ०४ बलिप्रतिपदा

It remains to be seen if there are any sculptures or paintings, early or late, which may be looked upon as representing any aspects of the Divall festival. The study of the representations of Puranic episodes in sculpture or painting would prove a very useful and fruitful occupation to any devoted student of Hindu religion and culture. In the extract from the Adityapurana about Sukhasuptika quoted by Hemadri reference is

made to the story of the dice-play of God Sankara and his consort Parvati on Kārtika Sukla I and the defeat of Sankara by his better-half in this dice-play. While this paper was being read out to my friend Mr. R. S. Panchamukhi, Director of the Kannada Research Institute, Dharwar, he observed that this story is represented in the sculptures at Ellora. I requested Mr. Panchamukhi to send me some detailed information about these sculptures and like a true devotes of Sarasvati Mr. Panchamukhi promptly supplied to me the following information: in his letter dated 16th January 1946:—

"While reading your illuminating paper on the history of the Dipavali festival, I observed that the play of Siva and Parvati with dice is depicted in stone. I have attached extracts from my inspection notes for your information. The play is depicted in the sculptures of the Ellors Caves excavated by Rastraküta Krsna I (A.D. 757-772)."

Extracts from the Inspection Notes:-

"Ellora Caves — There are in all 34 caves excavated on the sides of a hill about a mile from the village Verula or Ellora, Of these the first 12 are Buddhist, 13-29 Saiva (Hindu) and 30-34 Jain.

Cave No. 14 —... The left side wall has the following sculptures:—
(5) Siva and Pārvati playing with dice, Gaṇapati is standing close by and other attendants with cauris in their hands standing at the back.

Nandi below is being teased by the Ganas.

Cave No. 15 —Scene of Śiva and Pārvatī playing with dice as in the Kailāśa temple, below the bull at the foot being teased by the Ganas. The Gandharvas with garlands in their hands are shown in the air (Akāša).

Cave No. 16 - (Kailasa temple)

Four-handed Siva with four-handed Parvati seated below the tree on the mountain playing at dice. On the rectangular plate spread out in front are placed at the four corners, groups of

^{1.} I take this opportunity of recording my most grateful thanks to Mr. Psuchamukhi for this information as also for his scholarly interest in the history of the Dickit. He has promised to prepare a short critics on the Elicon eculptures representing the Sankara-Pärvuti dice-play (dynta) and send it to me for publication. I have also requested him to prepare similar papers on many other representations of Purkpic stories which he may have noticed in sculptures or paintings. These papers are bound to give a sound historical perspective to these stories.

five Pagadis. Sina has in his right hand some Kaudis in the act of being thrown on the ground. This exactly corresponds to the play of pagadis in the Divali festival.

Sankara and Pārvatī playing with dice. Sankara showing by his fore-finger that Pārvatī should play one more game, while Pārvatī expressing by the palm of her hand that she had played off and finished the game and would not play any further. Sankara is holding her hand at the fist to induce her to play and is shown with dice in the other hand. Sankara has four hands, while Pārvatī has only two.

Cave No. 21 - (Rāmesvara).

Siva and Pārvati playing at dice, Siva suggesting as before, by the fore-finger that she should play another game; Pārvati suggesting by her right hand that she had won the play and finished the game. Siva, however, drags her by the skirts of her garment and begins to play with dice by another hand. One of the female attendants is waving a fan and another holds the braid of hair of Pārvati."

The above notes on the Ellora sculptures of the 8th century A. D. pertaining to the Śańkara-Pārvatī dice-play are sufficiently illuminating. The relation of this dice-play to the dice-play of men and women on the Divālī day on Kārtika Śukla 1 as mentioned in the Ādityapurāņa extract quoted by Hemādri (c. A. D. 1260) 1 needs to be further investigated from sources earlier than A. D. 700, both literary and sculptural. It remains to be seen if the association of Sukharātri (= Yakṣarātri = Divālī) with dyūta or dice-play pointed out by Yośodhara has a definite origin in the dice-play of Śańkara and Pārvatī on Kārtika Śukla Pratipadā as mentioned

^{1.} Compare extract from Addyapurana quoted by Hemadri:—
"शङ्करस्तु पुरा सूर्त समजै सुमनोहरम् ॥ ८ ॥
कार्तिक शुक्कपक्षे तु प्रथमेऽहान सर्व्यत् ।
जितवा शङ्करस्तत्र जयं लेभे च पार्वती ॥ ९ ॥
अस्तोऽयं शङ्करो दःस्री उमा नित्यं सस्वोपिता ।"

Judging by Mr. Panchamukhi's notes the artist of the Ellora Kalla's temple sculptures has put in stone the spirit of elation of Parcuti and the crust-fallen bewilderment of Sankara in a maryellously delightful manner.

in the Adityapurāna. Is it possible to suppose that the Ellora sculptures representing this dice-play have any connection with the dice-play on the Divāli day? We have already seen that Somadeva Sūri who gives us a description of the Divāli festival in A. D. 959 lived in the reign of Rāṣṭra-kūṭa king Kṛṣṇa III about 200 years later than Rāṣṭrakūṭa king Kṛṣṇa I (A. D. 757-772) who excavated the Ellora caves, in which we find the sculptures about Śaṅkara-Pārvati-dyūta or dice-play so vividly depicted. I hope that the students of the history of Indian art would throw some search-light on this question and clarify some of the issues in this paper.

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20. Studies in the History of Indian Festivals-

The Divali Festival*

Some Puranic Texts on the Observance of the Divali Festival as quoted by Hemadri in his Caturvarga-Cintamani (c. A. D. 1260)

In my recent paper 1 on " The Sukhasuptika of the Adityapurana and the Nilamatapurana (A. D. 500-800) and its Relation to the Modern Divali Festival " I recorded the following equation :-

बक्षरात्रि } = { सुखरात्रि (according to बसोबर) associated with of कामसूत्र } = { सुखरात्रि (according to बसोबर) associated with

- = जनस्ती which according to Hemacandra (A. D. 1088-1172) is equal to दीवाली or दीपालिका.
- = दीपाडी { according to विकाण्डरीय } Before A. D. 1159
- = सुखरात्रि 2 the night of the New Moon when lamps are lighted in honour of sant (Apte's Dictionary).
- = दीपालिका (according to विकाण्डवीय—Between A. D. 1100 and 1159).
- = सुलसुप्तिका of the नीकमलपुराण (Between A. D. 500 and 800) and the आदित्यपुराण (quoted by Hemadri-c. A. D. 1260).

I have now to record the following extract from Hemadri's unan-विन्तामणि (कास्तिनेशेयसण्ड, Calcutta, Bib. Indica, 1889) in support of the above equation :-

^{*} Bhardiga Vidga (March 1947), pp. 58-73.

^{1.} Vide pp. 205-216 of the Journal of the Jha Institute, Allahabad, Vol. III, Part 2 (February 1946).

^{2.} Vide fallo 58 of MS No. 844 of 1875-76 of melleviribaid with टीका by रमुराम, who observes :--

[&]quot; तदुक्तं स्मृत्यंतरे । अमावास्यां यदा रात्री दिवा भोगे चतुर्दशी । पूजनीया तदा सरुमीविशेया मुखराजिका ॥ इति "

Pages 914-915 -

" महााण्डपुराणे--

तुष्ठायां विकतेकेन सायं संध्यासमागमे ।

भाकाशदीर्य में ची दबान्मासमेकं निरन्तरम् ।

सम्रीकाय श्रीपतये स क्षिया न विमुख्यते ॥

दामीदराय नमसि तुष्ठायां कोलया सई ।

प्रदीयं ते अयख्कामि नभोऽनन्ताय वेधसे ॥

ा इति द्वीपदानसन्त्रः प्राप्त । १८ १०० । १८६०-१०० वट व

अमावास्यां तुलादित्वे ² लक्ष्मीर्निद्धां विमुख्यति । सुलगादि ³ स्वरूपा सा प्रदीपोज्यलगाप वे ॥ कुसुरमञ्जूसीर्गात्र्वेदीपैगोरोचनाफ्लैः । वसुर्वधृनववध्य प्रच्लेक्शलया गिरा । प्रजयेव ⁴ सदा लक्ष्मीमलक्ष्मी सलगादिनीस् । क्षये पण्चपताकानां ध्वजमेकं गृहे न्यसेत् ।

L. Vide folio 141 of MS No. 825 of 1830-81 (B. O. R. Institute) of कालनिर्णय of आदित्य-महोपाच्याम कवित्रहाम — This author refers to आकाशदीप as follows:—

" तैलेनाश्युजं मासं दीपमाकाशवर्तिनं ।

दोलास्यं हरये दत्वा महतीश्रम (श्रिय) मस्नुते ॥ "

He further refers to उदमीपूजन on आश्विन अमावास्या together with अर्ध्ययस्तान, नीरांजन, stc. He quotes from वाराहपुराण ("कार्चिके मीमवारेण" etc.), from पुष्करपुराण ("स्वातिरियते स्वाचिद्व:" etc.) and from वदापुराण ("ऊन्जे शुक्रदितीयाया:") in his trentment of दीपावली.

2. The expression " आमाबास्यां तुलादित्य " may be compared with the statement of Albertani (A. D. 1020) in his description of Diealt (Vide p. 182 of Vol. II of Albertani's India. ad. by E. C. Sachau, London). Albertani says:—

marches in Libra is called Dienii "

a. Yadodhara explains the यक्षरात्रि का " सुलतातिः । यक्षाणां तत्र सन्निकानात् । तत्र प्रायशो सोक्स्य सूतकीया । "

4. In the celebration of modern Divalt the लक्ष्मीपूजन takes place on आखिन कृष्ण अमावास्था (= कार्तिक कृष्ण अमावास्था in North India). वाराहे।

बमावास्यां तुलादित्ये लक्ष्मीनिद्रां विमुज्यति । तरिमन् शुक्छे तदा विणास्तुकायामथ वृश्चिके ॥ छडमीप्रबोध: 1 दीया (पा) छिका इति यस्य छोके प्रसिद्धि: । कौ मुदी यक्षरात्रिक्ष कौसुमी फाल्मनी तथा। वासन्तिरिति विज्ञेया देशस्य महिमाश्चये 2 ॥ आश्विने पौर्णमास्याञ्च निशादेः कीयनं स्मृतम् । कीसदी सा समाख्याता काव्या होकविभूतये ॥ कासिके सितपक्षादी तिथी तु इसमांशकेः। यक्षाचां यक्षरात्रिः स्यात् कायां चेष्टसुस्राय सा ॥

L According to Hemidri सदमीप्रबोध = दीपालिका = सखरात्रि

The time of छक्मीप्रबोध (or दीपालिका) is uniformly indicated by the असाव्हपुराण, वाराहणराण and क्योति: शास्त्र by one and the same line " अमायास्यां तुलादित्य स्थमीनिंडां विमुखाति" in which the words " अमावास्यां तुलादित्ये " mean "On the New Moon Day when the Sun (आदित्य) is in the Libra (तुला) Sign of the Zolliac, " Albertani seems as it were to translate this line when he states : " lat Kartina or New Moon's Day when the Sum marches in Libra is called Divali. "

According to Dr. Harra (p. 23 of Puranic Records, Dasca. 1940) " Indiana were not familiar with Rasis earlier than the 2nd Century A. D. " If this statement is correct all the texts about Dienti (quoted by Hemadri) containing a reference to gest Ulit are later than the 2nd Century A. D. Hazra states (p. 104) that " Hemidri has verses 82-88 and 85-88 from Chap. Sp. verses 1-52 (of SREEGIN) and verses 31-40 from Chap. 112" (of the same), which is " sof lafer then 1100" (p. 105). Chapters 1-80 and 98 of the SKIESKIN now extant are the oldest, being amigned to c. A. D. 800 by Dr. Hazza.

E. The Kamasutra mentions three feativals viz. (1) यक्तरात्रि, (2) कीमुदीजागर and (8) सुव-सन्तद, These are called " माहिमान्य: कींडा: " by Yafodhara. According to वासहपुराण quoted by Hemadri the important festivals or rather the national festivals (देशस्य महिमाअये) are:— (1) कीमुदी, (2) यक्षरात्रि, (5) कीमुमी, (4) फाल्मुनी, (6) वासन्ति वर वासन्तिक, According to Yafodhara यञ्चरात्रि = मुलरात्रि; कीमुदी जागर takes place on आखिन full-moon day (आखयुक्यां हि पोर्णमास्यां); ami मुबसन्तक = मदनोत्सव (तत्र जुल्पगीतवाद्यपायाःकीहाः)

Virabhadra in his metrical commentary on the Kamashtra explains the three festivals of

Klimarüfra ne follows:-ं कुर्यांच्च यक्षरात्रिं सुनारात्रिः सा च क्रयते लोके । ऐस्यं कोवागस्या कीमुखास्तत्र निर्दिशम् ॥ मुक्क-तकोऽन शास्त्रे भवति वस-तस्य वासरः प्रथमः।"

(Vide p. 56 of Asmartira ed. by Kedarnath, N. S. Prem, Bomhay, 1900)

माधशुक्छचतुर्थान्तु वरमाराध्य च श्रियः । पन्चम्यां कुनदकुसुमैः प्जा सा कौसुमी स्मृता ॥ फाल्गुने पीणमास्यान्तु यदा वासविकासकः । जैया सा फाल्गुनी कोके कार्या कोकसस्द्रये ॥ चैत्राष्ट्रम्यामशोकेस्तु त्रयोदद्ग्यां स्मराचनस् । वज्ञ कार्यमशोकार्यं जेवा वासन्तिकेति सा ॥

षथ ज्योतिःशास्त्रे ।

बमावास्त्रां तुलादित्ये लङ्मीनिंडां विमुख्यति । तस्मिन् शुक्के यदा विष्णु स्तुलागामधिगव्छति । उत्तिष्टव्यवतो विष्णुः पश्चात् कृष्णचतुर्दशीम् ।

अथ भविष्यस्पुराणे।

स्नानं दानं शतगुणं कार्तिकं या तिथिभैवेत् ! प्रतिपद् ब्रह्मणश्चापि गुडमिश्रैः सदीपकैः । बासोभिरहतैश्चाचौगंच्छेत्तद् ब्रह्मणः पद्म् ॥ पुष्पैगैन्धैनेवैवेद्भैरास्मानं पूजयेद्बुधः । तस्यो प्रतिपदायाञ्च स गच्छेद् ब्रह्मणः पदम् ॥ 1

इति " कालनिर्णये विष्णुशयनादिकालनिर्णयो नाम सप्तद्द्योऽध्यायः॥"

- (1) पद्मपुराणे "कार्तिके मास्यमानास्या तस्यां दीनप्रदीपनं । द्यालायां ब्रह्मणः कुर्पात् स गच्छेत्परमं पदं ॥ प्रतिपदि ब्रह्मण्यश्च गुडमिश्वेः सदीपकैः । नासोभिरहतेः पूच्या गच्छेद्रै ब्रह्मणः पुरं ॥ स्नानं दानं द्यातगुणं कार्तिकायां तथा नृप । ब्रिस्सक्येपु द्यमदा पांद्यमाद्यमनाद्यिनी ॥ "
- (II) वामनपुराणे extract about वीरप्रतिपदा उत्सव described by त्रिविक्रम to बल्हि.
- (iii) भविष्योत्तरात् Dialogue between श्रीकृष्ण and युषिष्ठिर नरकचतुर्दशीस्तान on " क्रार्तिक-कृष्णपक्षे तु चतुर्दश्यां दिनोदये" नरक दीप, दीप to be kept all round, in manalous temples, palaces etc. स्तृत, पान etc. of men and momen पावणश्राद, विषभोजन तृत्य, वादन etc.— Royal procession to impect the illuminations पादाश्यञ्जपदायिनी वेदया going from house to house in the morning मुवादिनीदान by the king presents to all men by the King—मार्गपाली Occessory ब्रिक्टिया and दीपोत्स्त्व,

^{1.} Hemadri in जतलाण्ड (of चतुर्वगीचन्तामणि) Chap. 21 quotes (after सुखसुतिज्ञत description) extracts (pp. 250-259) about कीमुदी महोत्सव as specified below:—

The contents of the above extracts given by Hemadri (c. A. D. 1260) from अक्षाण्डपुराण, चाराहपुराण, उच्चोति:सास्त and अधिन्यस्पुराण may be tabulated as follows:—

Source	Festival	Features	Time
मह्मायहपुराण	कक्मीनिद्राविमी-	भाकाशदीप of तिलतेल in the even-	" तुलायां "
		ing in honour of god दामोदर-	or
		ळक्मीनिद्राविमोचन-सुलरात्रि-प्रदीपो-	'कमावास्यां तुळादित्ये'
Access to the last of the last	or दीपाडिका	उडवलन — सर्मीपूजन — बलदमीमल-	The state of the s
	by Hemādri	नाशनं Honouring newly-mar-	
		ried women (नवबध्ः).	-6 101 21
वाराह (पुराण)	Do	छक्मीनिद्राविमोचन — Description	"अमावास्यां तुळादिरये'
Territoria	And the second	of five national festivals:-	Today pilet
	market and	(1) कौ मुदी — " निशादेः की वर्न "	"शाश्वने पौर्णमास्यां"
	U and the same	(2) यक्षरात्रि— " कुसुमां गुकैः यक्षाची	"कार्तिक सितपक्ष
	-	इष्ट्युसाय कार्यो "	कादी विभी "
	a collect	(3) कीसमी "श्रियाः वरमाराज्य	'' माधशुक्ळचतुथ्यां
	The state of the state of	माधशुक्छचतुथ्या कुन्दकृतुमेः	पल्चम्यां "
		पश्चम्यां पूजा"	
HILL	1	(4) फास्गुनी—"वासविकासकः"	" काल्युने यौगीमास्यों '
	-	-"छोकसमृद्ये कार्या"	
		(5) वासन्ति or वासन्तिका"अशोकैः	" वैत्राष्ट्रस्यां "
THE REAL PROPERTY.	ALL WEST OF	अशोकार्यं स्मराचनं कार्यम्"	"चयोदक्यां"
25			THE RESERVE OF THE PARTY OF THE
ज्योति:शास	Do	छश्मीनिद्राविमोचन—विष्णुप्रवोध (बुक्के	''अमावास्या तुल्हावस्य'
		तुलायां)-on page 810 we read :- मिश्रुनस्ते सहस्राती स्वपयेन्मशुस्दर्न ।	
	10.00	तुलायां च महाराज पुनस्त्थापयेत्तथा ॥	
अविष्यरपुराण	ब्रह्मणः प्रतिपद्	खान, दान, with "गुडमिश्रेः सदीपकः"	"कार्तक प्रतिपद्"
	1	भद्दतैः वासोभिः—"पुष्पैः गम्बैः नवैः	
		वसैः जात्मानं पूजवेद्बुधः"	Marie Sales

Among the details recorded in the above table I am specially interested in the following:—

- (1) डह्मीयूजन etc. on the डह्मीप्रकोध night viz. the अमावास्त्रा when the Sun is in तुला (Libra) Sign of the Zodiac (according to महाग्रद्धप्राय).
- (2) यक्षाचाँ etc. on यक्षरात्रि on कार्तिक सितपक्ष (शुक्छ) बादी तिथी i.e. प्रतिपद् 1 (according to वाराहपुराण),

Hemacandra equates जनस्वरांच or यक्षरात्रि with दीवास्ति or दीपालिका but does not specify its time. Hemadri equates स्वसीप्रवीध on समावास्या (of आधिन) with दीपालिका and quotes the वारादपुराण, which refers to the celebration of यक्षरात्रि (attended with the worship of यक्षर) on कार्तिक ग्रुवस प्रतिपद्. At present आधिन अमाबास्या and कार्तिक ग्रुवस प्रतिपद्, which follows it, are both included in the term Divall.

In Chapter 13 of the Kālanirnaya Khanda (pp. 614-617 of Bib. Indica Edn., 1885) Hemādri quotes some texts describing "पुण्यानिष्य" from (1) पश्चपुराण, (2) मिवस्यपुराण, (3) वाराहपुराण, (4) देवीपुराण, (5) बह्मपुराण and (6) बामनपुराण. As these texts have a direct bearing on the history of the Divall Festival associated with the प्रतिपत् of कार्तिकश्चरूकपञ्च I reproduce them below to enable scholars to study them in their historical and cultural perspective:—

^{1.} Bhattoji Dikelia (c. A. D. 1560—1620) in his कालनिर्णयस्थ्रेप (MS No. 846 of 1891—96 in Govt. MSS Library, B. O. R. Institute, folio 28) prescribes वनदपुना (यसराहपूना) en क प्रतिपत्।—

[&]quot; तिथिविशेषे देवताविशेषपूजा समर्वते । प्रतिपद्धनदस्योक्ता द्वितीया तु श्रियः स्मृता। तृतीया तु मवान्याः स्याज्वतुर्था तत्सुतस्य ॥ etc."

In the कालनिर्णयदीपिकाविषस्य (MS No. 29 of 1871—72) by मृश्विह the above stanss is introduced as follows on folio 119 :—

[&]quot; तथा च पितामहः। प्रतिपद्धनदस्योक्ताः " तसुतस्य च "

Before this staum mother verse associating औद or धनद with प्रतिपत् is given as follows:--

[&]quot; और श्रीविरिज्ञागणेशमुक्तगस्त्रेदार्कदुर्गाः कमाद् — अवावामुक्तिमुन्यवस्मरशियांभोजासनाश्चेश्वराः एते स्युः प्रतिपन्भुनासु तिथिष्विति। श्रीदो धनदः । अंवा मातरः अवो विष्णुः अंभोजासनो बद्धाः। "

"अथ प्रतिपत्क्रमेण पुण्यतिथयः। तत्र तावत् पुण्या प्रतिपत् ।1

पद्मपुराणे ।

चैत्रे मासि महाबाही पुण्या प्रतिपदा पुरा ।
तस्यां यस्तपनं दृष्ट्वा स्नानं कुर्यावरोत्तमः ॥
न तस्य दुरितं किंचित्राध्यो व्याध्यो नृप ।
भवन्ति कुरुशार्युल तस्यां स्नानं समाचरेत ॥
दिव्यनीराजनं तद्धि सर्वरोगदिनाशकस् ।
गो-महिष्यादि यश्किव्चित्तस्य मृषयेन्तृपः ॥
चृणवस्तादिभिः सर्वस्तोरणाधस्ततो नयेत ।
माझणानां तथा भोज्यं कुर्यात्कृदकुलोद्ध ॥
तिस्न पृताः पुरा प्रोक्तास्तिययः कुरुनन्दनं ।
कार्लिकाश्युवे मासि चैत्रे वापि तथा नृप ॥

भविष्यत्पुराणे ।

विधीनां प्रवरा बस्माद्मक्षणा ससुदाहता ।
प्रतिपादिता बदा पूर्वे प्रतिपत् तेन उच्यते ॥
विस्तो क्षेताः पुरा प्रोक्तास्तिधयः कुरुनन्दन ।
कार्तिके वाश्विने मासि चेत्रे मासि च भारत ॥
स्नानं दानं वातगुणं कार्तिके या तिथिभवेत् ।
अग्निमिन्द्वा च हुत्वा च प्रतिपद्यपि भारत ॥
हिविषा सर्वधान्यानि प्राप्तुवादमितं धनम् ।

बाराहे।

कार्तिके सितपक्षादी तिथी तु बुसुमोधकेः॥

^{1.} Divakers Kala in his कालनिर्णवचित्रका (MS No. 818 of 1891—95—B. O. B. Institute, Folios 58—59) describes the ceremonies and ritual about दीपोल्सव starting with आश्विन कृष्णद्वादशी and ending with समद्वितीया. He quotes numerous texts on this topic such as "तिथितल्ले ज्योतिर्निक्न्चे नारदोक्तः", "निर्णयामृते स्कादोक्तः", "हेमाद्री निर्णयामृते स्विष्योक्तः", "हेमाद्री निर्णयामृते स्विष्योक्तः", विष्योक्तः, व्यासस्मृतो, राजनिष्ठिक्तः, मदनरत्ने पाद्योक्तः, विश्वदासीयोक्तः, दिवोदासीयोक्तः, काळाद्देरं, ज्योतिःशास्त्रोक्तः, विष्योक्तः, विषयोक्तः, विष्योक्तः, विष्योक्तिः, विष्योक्तः, विष्योक्

वात्राची । यत्र राजी स्थात्कायां चेष्टसुस्वाय सा । वासोभिरहतैः पूज्य गच्छेतै ब्रह्मणः पत्म् ॥ 2

असपुराणे ।

कार्त्तिके शुक्लपक्षे तु विधानं द्वितयं द्वि तत् । नारीनीराजनं प्रातः सायं मङ्गळमाछिका ॥ स्य चेत् प्रतिपत् स्वष्या नारीनीराजनं भवेत् । द्वितीयायां तदा कुर्यात् सायं मङ्गळमाछिका ॥

भविष्यत्पुराणे ।

बन्येख यदि वा प्रातः प्रतिपट् घटिकाहयम् । तस्यां नीराजनं कार्यं सायं मङ्गलमालिका ॥

तया च देवीपुराणे।

प्रातको यदि लम्बेत प्रतिपद् घटिका श्रुमा । द्वितीयायो तदा कुर्यात् सायं महल्लमालिका ॥ श्राधिनान्ते यदा दशेँ नारीजीराजनं भवेत् । नारीणां तत्र वैधव्यं देशे दुर्भिक्षमेव च । कार्तिके श्रुक्लपक्षादायमावास्या घटीह्यम् । देशमङ्गभयात्रैय कुर्यात् महल्लमालिका ॥

महापुराणे ।

कार्तिके शुक्छपक्षे तु प्रथमेऽ(ह)नि सत्यवात् । जितव्य बाहरस्तव्य जयं छेमे च पार्वती ॥ ततोऽहं शहरो दुःखी गौरीनिस्यमुखोषिता । तस्माद्युतं प्रकर्तव्यं प्रभाते तव मानवैः ॥ वस्मित्युतं जयो यस्य तस्य संवत्सरः शुमः । पराजयो विरुद्ध छामनाशकरो मवेत् ॥ श्रोतस्यं गीतवाद्यादि स्वानुछिङ्गैः स्वछक्कृतैः । विशेषत्रस्य भोक्तस्यं प्रशस्तैवान्यवैः सह ॥

^{1. &#}x27;' बाजार्जा'' is possibly a misreading for वद्याची found in the following lines quoted by Hamadri from the वासाहपुराण (description of बहाराजि) —

[&]quot; कार्त्तिके वितयसादौ तियौ तु कुसुमांछकेः । यसावौ यसरात्रिः स्थात् कारयौ चेष्टसुनाय सा ॥ "

^{2.} This line "बासोमि: '''ं ज़लणः पदम् " is also found in the extract from मविष्यस्पुराण (कालनिर्णय राज्य) quoted by Hemadri.

तस्वां निशायां कर्तस्यं शब्यास्थानं सुशोभनस् । गर्न्थः पुत्पेस्तथा वस्त्रीर्वेच्यरत्नैरळक्कृतम् ॥ दीपमाळापरिक्षितं तथा धूपेन धूपितम् । दियताभित्र सहितैनैया सा च भवेश्विशा । नवैवेस्त्रीत्र संपूज्या दिज-सम्बन्धि-बान्धवाः ॥ 1

पश्चपुराणे ।

प्रतिपदि च ब्रह्माणं गुडमिश्रैः प्रदीपकैः । बासोभिरहतैः पूर्य गन्छेद्रै ब्रह्मणः पदं ॥ गन्धैः पुष्पेयंवैवेश्वेस्तस्थानं सूप्येषसः । तस्यां प्रतिपदायां तु स गन्छेद्ब्रह्मणः पदम् ॥ महापुण्या तिथिरियं बल्दिराज्यप्रवर्तिनी । ब्रह्मणो हि प्रिया नित्यं यालेगी परिकारिता ॥

1. The extract (कार्तिके..... वास्थवा:) is identical with versus 9-15 of the description of सुल्युसिका (आदिल्युसणोक्क) quoted by Hemadri in the असलाव्ह (Pages 348-349). Preceding the description of सुल्युसिका the description of कामधेन मत from विद्युसण is given (Pages 844-848) by Hemadri, in which I find the following versus:—

"पापिनः पितरो ये च छुप्तपिण्डोदकिकयाः ।
चतुर्दश्याममायस्यां पिण्डदस्याप्नुवन्ति ते ॥
तत्र श्रीः पूजनीया तु मनुष्पाणां प्रयन्ततः ।
बन्धुभिः सहितैः पल्या नृत्यगीतप्रचागैरः ॥
यदि इपं प्रयातीह तस्य संवत्तरं जयं ।
धृते तु श्रीडिते हानी हानिः स्यादिचये धृवं ॥
सुखप्रीतिसुळाभः स्यादत्तरं मनुजस्य तु ।
गीर्या जिता पुरा शम्मुनभी जूतेर्विसर्जितः ॥
तेनासी शङ्करो दुःखी सर्वदोमा सुखान्विता ।
सिया सार्दं अगणोनिः शेते विष्णु सुखान्विता ॥
तस्या गत्री जनानां तु अतोऽयं सुखस्तिका । "

It will be seen from this extract that the story of शंकरपानंती चृत here mentioned as taken from बहिएराण is also found in the असपुराण and आदिलपुराण axiracts quoted by Hemadri.

माह्मणान्युत्तयेकोऽस्यां मानं च विशेषतः । स बाति परमं स्थानं विष्णोरमिततेत्रसः ॥ वामनपुराणे । बार्लं प्रति त्रिविक्रम उवाच । वीरप्रतिपदा नाम तव भावी महोत्सवः । तत्र त्यां नरकार्युलं ततो हृष्टा स्वळक्कृताः ॥ पुष्पध्यप्रदानेन वर्षविष्यन्ति तत्त्वतः । तत्रोत्सवो मुख्यतमो भविष्यति दिवानिकाम् ॥ " इति पुष्पप्रतिपत् ॥

The contents of the above extracts will be clear from the following table:—

Source	Festival	Features	Time
प्रशासन	चैत्रश्रतिपत्	स्तान, दिव्यतीराजन, गोमदिष्यादिशूषण, माह्मणभोजन — Three old and important विधित are (1) चैत्र प्रतिपद (2) माधिन प्रतिपद	चैत्र मतिपद
मविष्य ञ्ज रा ण	कार्तिक प्रतिपत्	(3) कार्तक प्रतिपत् Definition of प्रतिपत् :— ——————————————————————————————————	कार्तिक प्रतिपत्
		— Features of कार्तिक प्रतिपत् are:—जान, दान, अग्निह्दिः,-A man gets "सर्वधान्यानि" and "जमितं घनं" by observing the above fea- tures.	6
वाराहपुराण	कार्तिक प्रतिपत्	" कुसुमांञ्जकैः राजी यात्राची (यक्षाची)— पूजा with new garments (अहतैः वासोभिः)	" कार्तिके सिक्पक्षा कियो "

अक्षपुराण	कार्तिक प्रतिपत्	(1) नारीनीराजन in the morning and (2) मङ्गलमालिका in the	कार्तिक गुक्छ प्रतिपत् and द्वितीया
		evening. If the प्राचेषत is स्वस्था these features are shifted to द्वितीया.	
भविष्यस्पुराण	Do	नीराजन to be observed in the घटिकाद्वय of प्रतिपन् at sunrise and मक्गळमालिका to be observed in	Do
	down to	the evening.	Do
देवीपुराण	Do	If प्रतिपत् is only for one घरिका in the morning, मङ्गलमार्थका should be observed on the	
		evening of द्वितीया — If नीराजन is observed in the दश i.e. अमानास्था at the close of आखिन,	A STATE OF THE PARTY OF THE PAR
		it results in widowhood to lad- ies and famine in the country-	
-		शुक्छपश्च there is अमाबास्या for 2 गरिकांड (घरीद्वयम्), Hence मङ्गङ- माङ्किंग should not be observed	
	September 1	during this time (of जमावास्था) as such observance is ruinous	ACT SALES MADE AND ADDRESS OF
मस्युराण	Do	to the country. युव of सक्षर and पार्वती (in which सक्षर was conquered by पार्वती)	
	Will V	took place on this day - all	require
	III TOTAL	day.— गीतवास etc.— बन्दुभोजन Passing the night in the com- pany of द्याराज-दीपमाजा- Offer-	
	of the last of	ing new garments to Brahmins relatives etc.	
प्रमुराण	Do	Offering of गुज, दीप, and new garments (अइते: वासोजिन to God Brahmā and worshi	

	187	pping him with सन्त्र, पुरुष etc.— This प्रतिपद्म is loved by Brahmā. It is बङ्ग्सिक्सप्रवर्धनी and is hence called "बालेगी,"- One worshipping Brahmins on this day attains विष्णुस्थान,	a spirate
वासनपुराण	Do	The great festival of बीरपतिषदा with दुष्प, भूप, दान etc. takes place (on this प्रतिपद्) day and night.	Do

The features of the Divalt Iestival as set forth in the Puranio extracts quoted by Hemadri (c. A. D. 1260) amply show that this national festival possessed long prior to A. D. 1200 many of its varied cultural details which we now notice in the celebration of the festival year after year. As the Puranas are a mixture of texts of varied chronology it is convenient to make use of them through quotations from them taken in datable sources, which are helpful to the historical reconstruction of ancient Indian life and culture.

The evidence about the history of the Divill festival so far collected by me tends to suggest that the usual mentioned by the Kamusatra contains the oldest nucleus of our modern Divill festival. Unfortunately we have no details about its celebration about 2000 years ago. My study has so far disclosed the following facts about it:—

(1) According to Yasodhara the until is attended with use and gravity.

(2) According to the বাষ্ট্রবাস extract quoted by Hemadri the ব্যাবাসি was celebrated on কাৰিক যুক্ত সন্তিবল্ with worship of বস্তা (ধ্যামা),

In the present ceremonial of the Divili festival I have not noticed any worship of the was referred to in the winggin extract quoted by Hemadri. It appears, however, that as late as about 1800 A. D. the worship of \$44, the king of the was, was known as a feature of the Divili ritual to some celebrated writers on Dharmasastra as will be seen from the evidence traced by me:—

(1) Krspabhatta Ardel (c. 1800 A. D.) in his commentary on the Nirnayasindhu (A. D. 1612) of Kamalakarabhatta prescribes क्रेस्प्रा after

Vide my paper on "Some Authors of the Ards Passily" (Detucces A. D. 2600 and 1825) in the Journal of the Bombay University, Vol. XII, Pt. II, September 1943, pp. 68-69.

इड्डीपुडा on the evening of सुलगांत (p. 714 of the Chowkhamba Edition of the Nirpayasindhu, Benares, 1930):—

Text of Nirnayasindhu:—" अत्र विशेषो हेमाद्री भविष्ये—
" दिया तत्र न भोकम्पमृते वालातुराजनात् ।
प्रदोषसमये लङ्गी पूजियसा ततः कमात् ॥"

Krsnabhatta comments :-

"प्रदोषेति । प्रदोषे " छड्म्ये नमः ' इति नाममन्त्रेण छक्मी संपूज्य दीपदानं कार्यमि-स्पर्धः । ततः कमादिति पदान् छद्मीप्जानन्तरं प्रार्थना कार्यो —

"नमस्ते सर्व देवानां नरदाऽसि हरिशिया । या गतिस्त्राधसदानां सा मे स्वास्तदर्यनात्" इति ।

कुवेश्यूजापि कार्या-

" सुखराज्याः प्रदोषे तु कुंदरं पूजवन्ति वै ।" इति

बाक्यात् । तत्र मन्त्रः—

" धनदाय नगस्तुस्यं निधिवशाधिपाय च । भवन्तु श्वत्यसादास्मे धनधान्यायंत्रस्यः ॥ " इति । केचित् धनदप्तां त्रयोदशीः प्रदोषे कुवैन्ति, तक्षिमूंरुस् । "

It will be seen from the above extract that Kṛṣṇabhaṭṭa adds कुन्द्वा to the ritual about Divali mentioned in the Nirnayasindhu, which does not refer to कुन्द्वा in its account of the Divali. Unfortunately Kṛṣṇabhaṭṭa does not mention the names of texts from which he quotes in support of his view that कुन्द्वा should be performed after इंडमीपूजा on the सुन्दानिक्ष्येष,

(2) Kāsīnātha Upādhyāya (alias Bāhā Pādbye—A. D. 1790-1806) also adds क्वरपूजा to जदमीपूजा on the शुद्ध प्रतिपत् of कार्तिक as follows (Vide folio 86 of Dharmasinahu printed in the Jaganmitra Press, Batnagiri, by Janardan Hari Athlye):—

" अथ कालिकशुक्लप्रातपरकृत्य
"" अत्र लक्ष्मीप्जा कुवेरपूजा चीका ebo,)

Kasinatha does not quote any texts in support of the sarqual prescribed by

It is clear from the reference to savest on the Divall days made by two authors, who lived about A. D. 1800, that according to them the

^{1.} Of the following statement about the sescelation of कुबेर with अपोदशी:-

[ा] नगोदशी चनाज्यका कुवेश पित्रते कलाम्" Vide fot. 47 of MS No 305 of 1880-81 (B. O. B. Institute) of कालनिर्णय of माचवाचार्य (c. 1860 A. D. A

was a necessary ritual of the Divall festival as important as the छड्मीपुत्रा, I am of opinion that this क्येरपुत्रा is identical with यक्षाची on कार्तिक ज्ञान्त प्रतिपत् mentioned in the बाराहपुराण extract quoted by Hamadri (c. A.D. 1260). We must now try to hunt up more textual evidence in support of the savgar or unagar on the Divail days, which is possibly a relic of the वसर्थि, The present Divall ritual is preponderently Vaispavite. With the growth of Vaisnavism छड्मीपुत्रा (or worship of छड्मी or goddess of wealth on the Divail days) threw into back-ground the क्षेत्रपूता (or बक्षसञ्जा or बद्धाची) or worship of Kubera, the god of riches, associated with बह्मराजि, If this hypothesis about the genesis and development of the Divali festival is correct we can easily explain how the term wants fell into disuse and was replaced by the term द्वापालिका with its elaborate Vaisnavite observances such as लक्ष्मीपूजा, बल्दिपूजा, गोक्रीडन, गोवर्धनपूजा etc. In this connection I may point out that Gopālabhatta (A. D. 1530), one of the six Vrndāvana Gosvamins codified the ritual and practices of Caitanyaism in his elaborate and erudite Haribhaktivilāsa (20 chapters). In this exhaustive metrical compendium of Vaispava Acara and Anusthana, of which a brief survey has been given by S. K. De in his Vaisnava Faith and Movement in Bengal (Calcutta, 1942), chapter XVI (pp. 381-383) is entirely devoted to the vows and observances to be observed by a Vaisnava in the month or Karttika. "One of the special observances is the placing of lights (दीपदान) inside and outside the temple, in its pinnacle (किस्तरहीय), the lights being fed with ghee, sesamum oil, or camphor. Light may also be placed on streets, cross-ways, in water, in the houses of Brahmans, under trees, in cow-pens, and on difficult roads through forest and wilderness. Of great efficacy is the posting of lamp on an elevated pole in the air (आकासर्पा), and the nocturnal illumination with rows of light on the dark new-moon evening after due worship of sent. The vows of Karttika are to be taken from the eleventh fast-day of the bright fort-night of Asvina, Certain articles of food are to be avoided in this month, of which a list

^{1.} See the Regulations for the Himminutions in the Ain-i Akbari (A. D. 1690) p. 42-48 of Vol. I of Gladwin's Translation, Calcutts, 1891—" In order to render the royal Camp conspicuous to those who come from far, His Majesty has caused to be erceted in the front of the Dowlet Khamah, a pole up wards of forty purds high, which is supported by Sixteen sopes and from the top of the pole is suspended a large lantern which they call Akassdeenh" (अपनामादिया or आमादिया or आमादिया or अपनामादिया or अपनामादिया or was it a Meghul contrivaues?— The Ain-i-Aidars refers to the use of "Camphor Candles three yards long and some larger." Every thing was grand with the Meghuls.

is given (including honey, fish and flesh); one should not use oil or unquent, sleep on others' bed, take others' food, or associate with others' women. The special worship of Radha and Damodars in the month consists of the usual ceremonies, but a Brahman and his wife should be made to represent the deities, and worshipped with garment, ornament and feeding. On this occasion the eight stanzas on Damodara (दावीदराष्ट्रक) from the Padmapurana are to be recited. Other pious rites and acts are ; bath in the spring or well called Radha-kunda on the eighth day of the dark fort-night (Krsnastami); offer of light to Yama placed outside one's house on the thirteenth night (gongaless); worship of Dharmaraja or Yama the next day (कृष्णचन्द्रकी); nocturnal illumination (दीपाकि) mentioned above on the new moon night (अभावास्था) and fasting; worship of the Govardhana hill 1, represented by an artificial hillock of cow-dung, on the first-day of the bright fort-night (aggafaqq), accompanied by warship of cows (गोपूजा), and by their sport (गोकीहा); worship of the mythical King Bali and his wife Vindhyavall, represented in a picture, the same evening; worship of Yams, bath in the Yamuna and taking of meals, served by one's affectionate sister the next day (यमहिलीया or आतृद्वितीया), a well-known observance in Bengal; worship of cows on the eighth day of the bright fort-night called गोपाएमी, and so forth."

The foregoing injunctions of Gopalabhatta about the observance of Dirall are helpful to us for a regional study of the history of this festival. They show in detail how this Divali festival was observed by the Vaispavas of Bengal about A. D. 1500, if not earlier.

I now close this paper with the following table showing the chronology of the data about the history of the Divall gathered in this paper in continuation of the data recorded by me in my two papers on the subject, one in the Annals and the other in the Journal of Jha Institute:—

Chronology A. D.	Source	Particulars	
c. 1260	Hemādri's चतुर्वगैनिन्दामणि (बदखण्ड and		

^{1.} Vide pp. 472—478 of Vaisnava Faith etc. — The मुक्ताचरित्र of Raghunātha-dāsa tells s fanciful tale of Satyabhāmā and Kṛṣṇa. Satyabhāmā enquires if pearls grow on trees and Kṛṣṇa gives an account of his having grown pearl-orcepers which bore pearl fruits at Vṛṇdāvana during the दीपांडिका festival on the सीनमंत्र hill.

	नीराजन and मङ्गळमाछिका), सविष्यतपुराण (का. प्रतिपत् with नीराजन and मङ्गळमाछिका), देवीपुराण (का. प्रतिपत् with नीराजन and मङ्गळमाछिका), जहापुराण (कार्तिक प्रतिपत् with चूल etc.—story of हांकर -पावंती-चूल), पद्मपुराण (बिल्प्रतिपदा), वामनपुराण (बीरप्रतिपदा),
जादित्यमप्ट कवि- श्विम in his काळ- निर्णय	लड्मीपूजन on आश्विन बमावास्या with अन्यंगस्तान, नीराजन and काकाशदीप, (Quotes बाराहपुराण, अझ- पुराण etc.)
कालनिजैय of माधवाचार्य	" प्रयोदशी धनाध्यक्षः कुत्रेरः पित्रते कलाम् "
हालनिर्णेय सिद्धान्त with टीका	छक्मीपूजन on अमाबास्या called सुखरात्रिका
by रघुराम शस्त्रिणयदीपिका- वेवरण by नृसिंह	धनद or श्रीद (i. e. यक्षराज or कुषेर) associated with प्रतिपत्
बीरमझ (बच्चेल	बद्धरात्रि (ां कामसूत्र)=सुक्तरात्रि
महोजि दीक्षित in his कालनिर्णय- संक्षेप	'' अविषद्भनदस्योका''
हमलाकरमहांn }	Quotes numerous texts about दीपावली and allied बता
।छनिर्णयचन्द्रिका) र्ज दिवाकर काछ)	Quotes numerous texts about दीपोस्सव star- ting on आधिवस्ट्रणहादकी and ending on यमहितीया
owng नारदे in scommentary on निर्णयसिन्धु	Prescribes कुषेरपूजा or धनद्यूजा after अक्सीयूजन on आधिन असावास्या and quotes some early text in support of it,
ābā Pādhye in his valturg	Merely prescribes कुनेरपूजा after छड्मीपूजा on कार्तिक शुक्स प्रतिपत्त but does not quote autho-
	हुम in his काळ- निर्णय काळनिर्णय of माधवाचाय प्रकालनिर्णय सिद्धान्त with टीका by रघुराम प्रकालनिर्णयदीपिका- व्यरण by नूसिंह कंदर्पच्डामण of सिरमद्भ (बधेल विश्व दीक्षित in his कालनिर्णय- सिक्षेप स्मलाकरमहां) कं निर्णयचिन्द्रका) जं दिवाकर काल) कालनिर्णयचिन्द्रका) जं दिवाकर काल) कालनिर्णयचिन्द्रका) जं दिवाकर काल) कानिर्णयचिन्द्रका) जं दिवाकर काल) कानिर्णयचिन्द्रका) जं दिवाकर काल) कानिर्णयचिन्द्रका । जं दिवाकर काल) कानिर्णयचिन्द्रका । जं दिवाकर काल)

Since this paper was drafted I have recieved some interesting information about the Divall from friends who had read my paper on this subject published in the Annals of the B. O. R. Institute. I note this information below with my best thanks to these friends:—

(1) Shri S. R. Tikekar, Author and Journalist, Bombay, writes on 6-8-1946 as follows:-

"In Kumaon among the Pants, Joshis and Pandes Kuberapfijā is observed on the Dhanatrayodast. This is of course my personal information gathered orally from those who observe it.............About the Yakşas I have the following notes with mer—

Yakshini is the deity with a big temple even to-day in Almora.

Yaksha is said to be the name of a tribe of people from whom, it is said, Kashmir gets its name.

Ashoka seems to have employed Yakshas for building his Chaityas."

(2) Rao Bahadur K. V. Rangaswami Aiyangar writes from Madras on 9-8-1946 as follows:-

"I received the reprint of your fine paper on Dipavali five days ago, and now write to thank you warmly for it. Till I read it I had no idea of the Jain version of the festival.

The Vrataratnākara, printed by the Lakşmi Venkateśvara Press at Kalyan in Śaka 1848 (1926), fol. 278-279 and the Nirnaya-Sindhu, N. S. Press, 1926, pp. 146-47 deal with Dipāvali under the head of Narakacaturdait.

In South India, particularly in the district of Tanjore, in the heart of the Tamil Country the Dipāvali customs are as follows:—

Dipāvali comes by solar reckoning in the month of Tulām i.e. when the Sun is in Tulārāil i.e. approximately between the middle of October and the middle of November on the Caturdail of Kṛṣṇapakṣa in the early hour of the morning before day-break. During the current year Dipāvali comes on the "night" (taking the Indian day as running from sunrise to sunrise) of Tuesday, 22nd October 1946. That day Trayodail ends at 52. 75 nādigas after sunrise, i. e. about 3 A. M. of Wednesday, the 23rd October under European reckoning. The asterism Uttaraṣūḍhā ends a little before midnight and at the time of Dipāvali the asterism is Hasta. The bath (abhyoñjana) has to be taken before day-break, in the last yama or better in the last muhūrta of the night. Wednesday, 23rd October is noted in the almanac as the day for the Dipāvali festivities, and for Yama-tarpaṇam Thursday, 25th is New Moon, amāvāsyā, the day for Śrādaha. No abhyañ-jana, is permitted on a Śrādaha-dina, and ordinarily no food or drink, in

the Brühma-muhūrta prior to amāvāsyā. But sometimes Naraka-Caturdašt ends at day-break and amāvāsyā begins immediately or soon after. The partaking of sweets, after abhyaīijana is permissible before day-break as Dipāvali Snānam, though ordinarily both will be barred on other occasions. The next Dipāvali illustrates the different principles for observing the ritual which the āgamas, purānas and later smṛtis have discussed and which are summarised by Višvanātha and Kamalākara. The treatment in Kamalākara's work is more full than in Višvanātha's work, which is also later in date. Both were written at Kāšī.

According to Kamalākara the festival period is four days the trayodasi (of the dark fortnight), when a yama-dlpa-dāna has to be made (p. 146), the naraka-caturdasi, the next day, when at night, before dawn the auspicious bath (mangala-snānam with oil, i. e. abhyanjanam) has to be done before day-break (p. 148). The bath must be done, when it is caturdasi, but the Lakşmi-pājā and the nirāsijanam (waving of lamps) must be done in pradoṣasamaya, preferably at midnight on trayodasi. The conjunction of the asterism svātī with caturdasī is deemed the best time, but as this may not always occur, the asterism is less important than the tithi. On the New Moon Day the ordinary Śrāddha of the month should be done, but an exception is made in allowing that Śrāddha day certain articles of food which are interdicted in Śrāddhas, but are indicated for auspicious occasions. Thus in South India on this day pappadams can be fried and served even to those who have to do the Śrāddhas, while it cannot be done on other new moon days.

At midnight of New Moon, the expulsion of A-Lakşmi is done ceremoniously by the women of the city, with the noise made by Sürpa-dindima, i. e. winnowing fans used as drams. On the Pratipat or the first day of the bright fortnight following Dipāvali, a pūjā must be done to Bali, the emperor who was put down by Viṣṇu, and another to the mountain Govardhana, pictures of both being drawn on the floor and worshipped with flowers, fruit, invocation and nirānjanam.

With this ends the three days Dipavall festivity. Games with cows and gambling are also prescribed on the Pratipat. In other works gambling is advised on Dipavall night, as it is a time, when the goddess of wealth (Lakşmi) is propitions.

The Dipovali morning (before dawn) should be celebrated with fire-works, as they are intended to show the way to the manes (ulkahastā narāh Kuryuh pitrnām mārga-daršanam—p. 148).

In South India on Dipāvali morning, the wife anoints the husband, and this is done specially by the newly wedded. For this purpose the son-in-law (and his parents) must come to the bride's house for the first Dipāvali after marriage, when they are feasted. Rich cloths and ornaments are presented by the parents of the bride to the son-in-law, while the parents of the son-in-law bring or send through him a rich sarres and a jewel to the bride. In Mysore the Pratipad day is specially indicated for honouring the son-in-law and is more important for the purpose than Dipāvali.

Even a cruel mother-in-law must make her daughter-in-law take an oil bath on Dipāvalī day. A person who avoids baths must bathe at least once a year on Dipāvalī. Such ideas are humorously woven into vernacular proverbs in Tamil, Telugu etc.

After day-break following Dipāvali baths, every one goes round to the houses of his friends to ask if they have had "Gangāsnānam." The visitor is given tāmbūla, fruits and sweets. The abhyanjana is a combination of both good luck and Gangā-snāna ("taile Lakṣmīr jale Gangā dipāvalyāścaturdaśim", p. 146, and the comment is added "prāya" iti šeṣah).

The salient features of the accounts in the two nibandhas are:-

- (1) mangala-snana with oil of everyone in the house before day-break.
- (2) Fire-works.
- (8) Insignia of Lakemi to be displayed e.g. betel-chewing before the bath by the married ladies and virgins.
- (4) Distribution and consumption of sweets.
- (5) A propitiation of Yama, the god of Death, the day prior to Dipavall
 the expulsion of A-Lakşmi from the house by the ladies after
 mid-night on New moon day and Mārgapāli (govardhana-pūjā)
 on the day after the New moon.

In South India all phijas are now omitted as well as yamatarpanam. Lakṣmi-phjā is not done but auspicious songs are sung by ladies, when the married women are made, after chewing betel, to sit over a plank and get annointed before a bath, in which the words "Lakṣmi-Kalyāṇam" occur. The Crackers, which are used in China and Indo-China to scare away demons and e. g. Rahū during an eclipse, are now used as tokens of rejoicing, while the Smrti seems to take them (e. g. rockets) as mārga-darši to the manes. The ceremony is in honour of Bali.

Honour is shown to the Dailya at the instance of Visnu. In South India the tradition is that the Asura Naraka who had oppressed the good,

was destroyed by Sri Krsna, and the god ordered the day of the removal of the Asura to be celebrated in honour of the demon (!) not in memory of the relief given to people by the destruction of the demon. The Tamil Lexicon published by the Madras University Vol. IV, p. 1942, states that Dipavali or Naraka-Caturdasi was a festival started by Sri Krsna at the request of the demon Naraka, when he was destroyed. The story of the destruction of the demon, at the request of Indra, for the recovery of the ear-rings, of which the demon had dispossessed Diti is told in the Mahabhārata (Sabhā Parvan, Chap. 55). There is no mention in the Epic of any request of the kind made to Srikram and granted by him. The story is also told by the Bhagavata, X, 59, and by the Harinamia, 2, 63-64. In none of these is there any mention of this story of the celebration being ordered by Sri Krsna in response to a request for commemoration made by the demon he had slain. In the legend of the slaying of Gayasura the demon of Gaya, there is such a legend of commemoration of the asura by his body becoming the homa-pitha. I suspect that some such transformation has been made in this legend. But why should the celebration take place on Asvina-Krana-Caturdast ! The " dark fourteenth " (Krana-Caturdast) is first changed to Krsna Caturdast, a day commemorating an exploit of the Hero-god. Like the Christian All Souls' day Naraka-Caturdasi was apparently a night in which all spirits in Hell (Naraka) were freed by certain pûjûs done by their descendants on earth. This is shown by Naraka -Caturdail coming midway between a trayodail in which the god of Death and controller of Hell is propitiated (yama-tarpanam) and the New Moon in which tarpana is done for the good of the manes (pitr-tarpanam). When ancestral spirits are freed and pleased they grant boons and welfare and the central day is devoted to the celebration of the consequential prosperity (Luksmi-paja). The name Naraka is confused with that of the demon destroyed by Krsna and the legend that is current in south India, without any epic or Puranic support is the result. It is an illustration of the way in which legends grow.

In recounting the exploits of the demon Naraka, Harivania II, 63,7, occurs the cryptic verse :--

" Teaştrur-duhitaram Bhaumah Kaserum-agamat-tada=Gajarupena jagraka rucirangim Caturdaim."

"The expression Caturdailm" as applied to Kaseru is interpreted by Nilakantha as fourteen years old ("Caturdailm" Sarvadā Caturthyā daiayā yuktam, sa ca garbha Kaumārapauganda-Sandhiyauvanam itidaiabhya ārdhisam pancadaiabhyo arvāk Caturdaianārsikim ityarthah). I wonder if the Naraka-Caturdast arose from this phrase.

The verse embodies, I think, a confused memory of a mixture of some old Vedic legends. Trastr is the son of Visvakarma, identified sometimes with him and with the sun. Trastr's daughter Kasera is after her abduction and appropriation as his queen by the Asura Naraka, properly Naraka-Caturdasi. The festival occurs in the month of Asuina and the Asuina are the sons of a daughter of Trastr. Their mother's name is given usually as Saranya, who was married to Vivascan. But he had many other daughters also. One of these may be regarded as Kasera identified by confusion with the number of the Asuina, and then Asuina—Caturdasi and Naraka-Caturdasi will be equated!

The Jain legend making the festival commemorate the parinirudna of Mahāvīra has internal inconsistancies. What is the connection of prosperity in the world (Lakṣmī Pujā with the death of a sage who renounced riches? Why should death be celebrated with lamps, and nirānjana? What is the origin of the pājā to the goddess of prosperity, who being invoked to grant a lakh replies (in the mouth of the presiding purchita) that a lakh and a quarter profit (savāi lakṣa lābha) is granted? I fear that most Jain legends are deliberate distortions of older Hindu legends.

In the paper there seems to be some confusion between Dipdvali and Krttikādīpa on the bright fifteenth (Paurņimā) of the Solar month of Krttikā, which is celebrated with the lighting of lamps on a large scale in every house, with public illuminations and a bon-fire in the temples, before the God, symbolizing the destruction of some demon of darkness. In Arunācala (Turuvanamali in South India) on the bill, above the temple of Arunagirinātha (Šiva) a huge beacon is lit on the bright fourteenth (Caturdast) fed by tons of ghee, and it is visible far out on the sea. The accounts in the nibandhas of the two Caturdasis are given continuously as the treatment is by tithi or māsa indifferently.

In the northern Tamil areas, the Kartigai festival (as the latter is called) is more important than the Dipăvali. In it the new bride is invited to her husband's home, for the first time, accompanied by presents, and she has to light the lamp of the house and start its illumination. Silver standard lamps are presented for this purpose by the parents of the bride. There is, however, no bath and no merit attaching to it and no Lakşmi -pūjā, though worshippers of Siva are making it a Saiva version of Dipāvali and celebrate it as a festival in honour of Gauri, the mother of Kārtikeya.

In Tanjore District and the Districts south of it the Kartigai festival is less important than the Dipavali. A feature of the Kartigai festival is the making and consumption of the balls of fried rice mixed with molasses. Large balls are sent with the new bride to her future home on the day.

Throughout the month of Kartika lamps are placed in front of houses, in niches provided for them on either side of the doorpost every night. I hope this somewhat desultory account will be of some little interest to you. It reflects the interest your paper has had for me. "

In recording above the learned note of Rao Bahadur Rangaswami Aiyangar I have to express my deep gratitude to him for the painstaking manner in which he had expressed his scholarly reaction to my paper on the history of our national Divili festival, The mixture of several traditions and legends which have sweetened the celebration of this festival needs to be analysed carefully with a view to studying the genesis and development of every one of its numerous features which we see today. For a further study of this festival and in particular for a study of its regional variations I earnestly invite the cooperation of scholars and laymen in different provinces of India and greater India. Rao Bahadur Aiyangar has given us a fair idea of this festival as it is celebrated in South India, I shall feel thankful if other scholars publish their views with documentary evidence not only about the history of the different features of the Dieali but also put on record description of all beliefs and ritual current in different parts of India with regard to this festival. If any notes on this subject are sent to me I shall incorporate them in my further studies with acknowledgement. In all studies pertaining to the history of Indian culture the correlation of historical evidence with the present-day beliefs and practices is absolutely essential but the success of this correlation is entirely dependent upon the willing cooperation of critical scholars, who alone can understand any problem in its historical and regional perspectives and bring forth pertinent facts, which are likely to throw some new light on the age-old problems of Indian cultural history.

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INDEX

THE RESIDENCE OF THE PARTY OF T

By A. D. Pusalker

Note: "Asterisk (*)" refers to the particular page number and the footnote thereon, while "n" to the footnote on that page.

A

Abbott, J. 188n Abdul Rahamana 213, 221 Abdur Razzaq 3n, 5, 7, 41, 42, 210n Abhidhana-cintamani 98n Abhilaşitārtha-cintāmani 72 (See also Mānasollāsa) Abul Fazi 14, 17, 27 Account of the Manners and Customs of the Modern Egyptians 175 Acharya, Vaidya Jadavaji Trikamji 87 Acyutananda 167 Adityabhatta Kavivallabha 254 Adityapurana 226a, 228, 229, 2310, 232, 233, 234, 235, 237*, 238, 239, 247n Administrative System of the Marathas 117n Afzalkhan 92n, 95, 97, 98, 99, 103*, 104, 108, 109, 111 Agnicurns (gunpowder) 10, 4 Agnipurana 63 Agra 11, 24n, 49, 89, 227. Agrawala, Dr. V. S. 49n, 50, 75 Ain-i-Akbari 14, 20, 27, 88n, 89, 178, 201, 226, 252n

Aitareya Brāhmana 139 Aiyangar, Rao Bahadur K. V. Rangaswami 67n, 159, 255, 260 Aiyangar, Dr. S. K. 110n Ajanta 76 Akasabhairava - Kalpa 45, 208, 210. 212, 223 Akāšabhairavatantra 5* Akāšadīpa 240e, 243, 252e, 253, 254 Akbar 14, 17, 20, 27, 28, 88n, 89, 201, 252n Aksa 126n, 127, 129 Alberuni 213, 214, 221, 231, 240n Alberuni's India 213n, 240n. Alexander 57, 63, 65, 68, 69, 70, 83 Altekar, Dr. A. S. 144n, 147 Amarakoia 98n, 100, 106n, 157 Analādhyakşa 3, 8 Anandalahari 169n, 172n Ananta 155n Anantabhatta 159, 160 Anantakavi 8 Ancient Monuments of Kashmir 10, 27, 41, 66 Anklesaria, B. T. 88n Annam 77, 79

Apastamba 130 Appaya Diksita 167n Apte, D. V. 1030 Apte, D. V. and Divekar, S. M. 98n, 103n, 140 Apte, V. S. 72, 87, 228, 235, 239 Arabian Nights 21, 75 Arabic History of Gujarat 8 Arabs 2n, 18n, 21, 69, 83 Aranipura 202 Aratu 128n, 129 Aravamuthan, T. G. 10, 28 Arde, Krsnabhatta, See Krsnabhatta Arde Arrian 60 Art of War in Ancient India 62n. 126n, 128n Arthasastra 63, 88, 89, 131, 138, 139 Aryan Festivals (in Marathi) 206n, 214n, 217 · Asafaddaula 52 Assyrians 57, 62, 82, 124, 125n Astanga-hydaya 87 Asthanakūta 211, 225 Atharva-Veda 130 Athavale, R. M. 223 Athlye, Janardan Hari 251 Aufrecht 42n, 43, 167n Aurangzeb 13, 29, 49, 69, 90, 103n, 114n

B

Baber 2, 7, 8
Babylonian 83
Balkrishna, Dr. 9
Bali 212, 214, 225
Ballana 202

Bans 140 Bana (rocket) 12, 14n, 18, 19, 29, 43, 45, 46, 47, 48, 50, 54, 55, 56, 210, 224 Banavidya 210, 2240 Banduk - See Bundook Barbara 204 Barbosa 8, 42, 68 Bedawins 174, 175, 176, 182, 186Bedouins 83, 84, 174 Belgam 5, 6, 7 Belvalkar, Dr. S. K. 86, 101n, 155n, 156, 171n, 172n Bendre, V. S. 96n, 112n Bengal 6e, 7, 23, 49, 54 Benjamin 82, 83 Bentinck, Lord William 24n Bernier 13, 14n, 29, 49, 68, 69*, 96n Berthold Schwartz 32, 36 Bhagavata-purana 74, 146, 158, Bhagava Zenda 114e, 115e, 116, 117a, 118, 119a, 120, 121, 122 Bhanubhatta - See Harikavi Bhänuji Dikşita 106n Bhanupandita 151e, 157 Bharata 177 Samsodhaka Bharata Itihasa Mandala, Poona Sn Bharhut 75, 1280, 144n Bhaskararya 167 Bhat, B. V. 117n Bhattacharya, Prof. D. C. 49n, 50 Bhattoji Diksita 244n, 254

Bhavani Sword 92, 93, 94, 95, 96, 97, 98, 99, 100, 101n, 102, 103, 104, 105, 106, 107, 109, 110, 111, 112, 114n Bhave, V. K. 55 Bhave, V. L. 90, 97, 102n Bhavişyatpurāna (Bhavişya Purana) 227n, 242, 243, 244, 245*, 246*, 248, 249, 254 Bhavişyottara Purāna 206*, 222, 242nBhayani, Dr. H. C. 2130 Bhide, B. A. 204, 208 Bhuśandi 11, 12, 28 Bhusundt 86, 90 Bijapur 6n, 11, 21, 22, 26, 89, 92n Bilhana 1550, 157, 171 Bilvamangala 152n, 153 Birdwood, George C. M. 75 Birdwood, Sir George 92n Birth of China 91 Bishop 57 Bishop, C. N. 90 Bombay 1n, 74, 76 Bombay and Western India 96n. 97n, 100m, 115n Bombay Gazetteer 116n, 117n, 189nBoolag 144, 145 Bow 57, 58, 59, 60, 61, 62, 63, 64, 68, 69 Brohmapurana 227n, 240n, 244, 246, 247n, 249, 254 Brahmandapurana 227n, 240, 243n, 245, 253

Brahmans, Theists and Muslims of India 193n Brahmavaivarta Purana 152n Brahme, G. B. and Paranipe, S. M. 216n Bahadamba 202 Brhat-Kalpasûtra 88 Behat-Sarngadhara-paddhati 63 Briggs, 2n, 18n Brock, Alan St. H. 33, 85, 36, 37 Brose, Henry L. 57n Brown, Dr. W. N. 203* Buchanan 53 Buckland, C. E. 142n Bühler, G. 155. Bukks 110, 111 Bullock-Cart 125, 127n, 128 Bundook (Banduk) 15, 16, 18, 19, 20, 21, 26, 27, 28, 29, 30. 70n Burgess, J. 1n, 26n, 29 Burhanu-i-ma'athir 6 Burnell, 42n, 18n Burton 21, 174, 186

C

Caitanya 154
Cakradhara 205*, 208, 222
Cambridge Ancient History 176n
Cambridge History of India 128n,
148n
Campā (wife of Sambhāji) 114*
Campāell, Sir James 101n
Campū-bhārata 8, 159
Candragupta II, 63
Candragupta Maurya and his
Times 64n

Candraprakāša 245n Catalogue of Venetian Coins in the Madras Government Museum 10, 28 Catalogus Catalogorum 42n, 48e, 167n Caturvarga-Cintāmani 206, 222, 229n, 239, 242n, 253 Cavalry 57, 58, 59, 61, 68, 69, 70. 71, 81 Champaner 20, 5, 7 Chandogya Upanisad 127n Chandorker, P. M. 100n Channakesvara 202 Chao Hsüchmin 36 Chapekar, N. G. 26, 30 Chaudhuri, Dr. J. B. 11, 12, 28 Chaugan (Polo) 68, 72 Cheng 7 Cheng Ho 6 n, 7 Cheng, Dr. T. K. 91 n Chhattisgarh 202 n, 227 China 3 n, 7, 36, 37 n, 38, 39, 40, 56, 58, 74, 77, 78, 90, 910, 132, 138Chiplunkar, Krishnashastri 217 n Chiplunkar, Vishnushastri 159 Chitrav Shastri, S. V. 194n. 200n, 205n Chronology of Modern India 1n. 26nCoates, T. 53, 191 Cochin China 6n, 77 Commissariat 8, 68

Conti, Nicoloi 202, 223

Creel, H. G. 91

Customs of the Moosulmans of India 144 Cymia 31, 32 Cyrus 83

D

Dalapatiraya 3, 8 Dallana 87, 88 Damodara 148 Dandan uliq 77, 79 Dandekar, Prof. S. V. 89 Dara Shukoh 11, 28, 69 Darius 83 Dašakumāracarita 171n Dasara 94 Das Gupta 148n, 152n, 153, 154 Das Gupta, N. N. 152, 155, 156 Date, G. T. 62, 63, 126n, 128 Date, Y. R. 145n Date, Y. R., and Karve, C. G. 51n. 55, 90 Davies 125n Davis, Prof. Tenney L. 31, 32, 37, 38, 41 Davis and Ware 38, 41 De, Dr. S. K. 152n, 153, 154, 252 De. Frezier 32, 38 Desai, P. B. 118n Desināmamālā 218, 228, 284 Devabodha 86 Devaraya II, 3n, 41 Devikkapuran 202 Devipurana 244, 246, 249 Dhanurveda 58s, 60s, 61, 68 Dharmasindhu 251, 254 Dhola-Marara Daha 160

Dictionary of Indian Biography 142n

Dikshit, S. B. 234e

Dikshitar, Prof. V. B. B. 60, 139, 140

Diodorus 85

Dīpamālā 216, 229n, 230e, 231, 247

Dipālikā See "Dipāvali" and "Divāli"

Dipāvali 53, 54, 189, 191, 201, 202e, 206e, 210, 212,213,217, 225, 226, 286, 254, 255, 256, 257, 258, 259, 260

Divakarakala 245n

Divail 51*, 53, 54, 55, 187, 188n, 189n, 190, 191, 192, 193, 194, 195, 198, 199, 200, 201, 202*, 203*, 204, 205, 206, 207*, 208, 210*, 212, 213, 214*, 215, 216, 217*, 215*, 219, 220, 221, 223, 224, 225, 226*, 227*, 228, 229, 232, 234, 236n, 237, 238, 239, 240n, 241n, 244, 250, 251, 252*, 253, 255, 260

Divekar, S. M. 98n, 152n Divekar, S. M. 98n, 103n, 118n Divedasiya 227n, 245n Douglas, James 96*, 97n, 100,

115n Dow 23, 29 Dutt, Uday Chandra 116n

Dvārakā 207

E

Early History of India 62n, 194n

Early Islamic Pottery 78

Early Travels in India 146n

Edwards, S. M. 92*

Egyptians 57n, 82, 85, 123, 124n

Egyptian Wall Paintings of the

Tombs and Palaces of the XVIII

and XIX Dynasties (1600-1200

B. C.) 123n

Ekanātha 46, 47, 48, 49
Ekanāthabhatta 146
Ekanātha-caritra 46
Elliot 3n, 41n, 210n
Ellora 236*, 237*, 238
Encyclopaedia Britannica 2, 31, 32, 70n, 78, 82, 88, 123, 126
Encyclopaedia Italiana 80

Encyclopaedia of Religion and Ethics 189n, 192, 193, 199 Erskine, 8

Erwine, W. 11 Ezekiel 174, 175, 181, 184

F

Farquhar 151n, 169n Feristha 2n, 6*, 18n Fleet 206n Foo Chow Foo 132n Forbes, A. R. 2n Forgotten Empire 202n Forrest, G. W. 94n Franks, H. George 93 Friar Odoric 6n

G

Gajapati Prataparudradeva 42-3, 45n, 48, 49, 55 Galenus 80 Gaņeša 146n

Gangadevi 110 Ganges 2 Gardner, Alexander 175 Gaudapadacarya 168, 169 General Lake 24n Genesis 174, 181, 182, 184, 185 Gerini, G. E. 199, 200 Getty, Alice 146n Giles, H. A. 139n Gingell, William Raymond 132n, Gladwin, Francis 38n, 40, 89, 252nGlanville, S. R. K. 174n, 176 Glossary (Maj Dirom) 26, 54 Gos 6, 13, 92n Gode, P. K. 112n, 180 Gode, P. K., and Katre, S. M. 200n Goetz, Dr. H. 76, 203n Goodrich, Prof. L. Carrington 37, 38, 90 Gopalabhatta 154n, 252, 253 Gophana (Gospana) 83, 86, 87, 89, 90 Gore, Prof. N. A. 234n Gosfivis 205, 208, 222 Govanna 202 Government MSS Library (B. O. R. I.) 8, 43, 58, 60°, 74, 87, 89, 99n, 105n, 113n, 115, 119n, 146n, 158, 244n Government Oriental Manuscripts Library, Madras 110n, 168 Govindacarya 145 Govinda Vaidya 3n, 7 Grant Duff 92n, 97, 100, 102n

Grassland and Farmland as Factors in the Cyclical Development of Eurasian History 57 Greeks 63, 64n, 79, 81, 84, 124, 130 Griffith 126n, 127n Grottanelli, Dr. V. L. 80 Gujarat 2*, 6*, 8, 42, 47, 68, 89, 115, 124n, 204, 205, 227 Gujual 15, 27 Gulistan 40 Gunpowder 1e, 2, 3, 4, 5, 6, 7, 8, 10, 26, 28, 30, 31, 32, 40, 58, 201, 210n Gupte 202n Gupte, B. A. 190 Gupte, Y. R. 94n н

Haihayendra-carita 115e Hammerton 213n Hammira 148 Hamsavilasa 145n, 158 Hannibal 83, 84 Hanway 28, 30, 143 Harappa 125, 126 Harem 15, 16

Harikavi 4e, 7, 92, 102 n, 105, 106, 107, 108, 109, 112*, 113, 114 n, 115, 116, 120

Harivania 140, 258

Harivijaya 51, 90

Harmopolis 174

Harşa-carita 75

Harşadeva 155 n, 156

Harsavardhana 216, 220

Harun-al-Rashid 21 Harwan 660, 67, 68 Hazra, Dr. R. C. 202 n, 231 n, 241 n Hemacandra 98 n. 218, 219, 221, 228, 229, 234, 239, 244 Hemādri 205, 206, 222, 226 n, 229 n. 231, 232, 235, 237. 239, 241 n, 242 n, 243, 244, 245 n, 246 n, 247 n, 250, 252, 253 Herodotus 82 Hillebrandt, A. 193 n Hindu Feasts, Fasts and Ceremonies 193 n Hindu Holidays 188 n Hinduism 198 n Hippocrates 80 Hirs Lal 8 Historical Events 21 Historical Selections (Baroda Records) 53 History of Aryan Festivals 187 History of Classical Sanskrit Literature 149n, 159, 228n History of Dharmasastra 227n History of fine Arts in India and Ceylon 77 History of Fireworks 33, 35 History of Gujarat 8, 68 History of Hindoostan 23 History of Hindu Chemistry 1, 3n. 9 History of India (Elliot) 3n, 41n, 210n History of India (Wheeler) 65n History of Indian Atsronomy (Marathi) 234n

History of Indian Literature 127n, 152, 215n, 231 History of Marathi Literature 15ln History of the Marathas 92n History of Sanskrit Literature 148n, 149n, 155n, 171n Hittites 83 Hobson-Jobson 20, 27, 29, 53, 72, 190, 201 Holwell 21 Holy Bible 64, 82 Homer 57n, 82 Hopkins, E. W. 192, 193. Horse 57, 58, 59, 61, 62, 63, 64, 65n, 66, 68, 71, 81

Ibn Battuta 6n
Ibrahim Adilshah II 6n
Indian Bullock-cart 123, 124
Indian Ephemeris 150n
Indian Literature in China 139n
Indika 60
Industrial Arts of India 75
Inscriptions in C. P. and Berar 8
Invasion of Alexander 63
Iranians and Greeks in South
Russia 74
Isaiah 174, 175, 181, 184
Itihūsa-samgraha 1n, 30, 52,
97n

J

Jacobi 203 Jagannätha Pañcanana 167n Jaina Citra Kalpadruma 146n Jaina Kalpasütra 203, 227n

Jaina Satras 203 Jain Stupa of Mathura 75 Jaising of Amber 11 Jakkharatti 218, 219, 228, 229, 234, 239, 244 Jalhana 149, 150*, 155, 157, 171 Jalna 205 Jari-Patka 114n, 115n, 117e, 118, 120Jarrett 201n Jatasimhanandi 170n Java 51, 85 Jayamangalā 218n, 228 Jayarama Kavi 94n, 97n, 98n, 1070, 108, 109, 118, 158 Jahangir 11 Jesuits and the Great Mogul 11 Jivananda Vidyasagar 208n Jñanesvara 204, 205, 222 Jaanesvari 890,90, 204, 206, 208 Jolly, J. 88, 193n Joshi, C. N. 90 Joshi, C. V. 53 Joshi, S. N. 118n, 121n Jung Ken 135 Jyotihiastra 241n, 242, 243, Jyotisaratnamāla 206e, 220

K

Kadalür 202

Kadambakula 206n

Kak, Ramehandra 10, 27, 41,
66, 68

Kakati, Dr. B. 157n, 158

Kalādarša 245n

Kalakācāryakathā 203. Kalanirnaya 240n, 242, 244, 251n, 254 Kalanirnayacandrika 245n Kalanirnayasiddhanta 239n Kalasa 155n Kalhana 155n, 215n, 231* Kalidasa 66n, 117n Kalmeri 1n Kalpadrukośa 90, 235 Kamalakarabhatta 250, 254 Kamasatra 218s, 219, 227, 228, 229, 234, 239, 241n, 250, 254 Kamesvara Süri 167 Kampana 110, 111 Kanauj 2, 7, 216 Kandarpacüdāmani 218, 254 Kane, M. M. Dr. P. V. 227n Kannada Inscriptions from the Madras Presidency 206n Kantaliyar 202n Kanthiravanarasarajavijayam 30 Karmarkar, Dr. A. P. 227n Karmarkar, Prin. R. D. 217n Karmarkar, V. P. 93 Karpeles, Mile. Suzanne 77 Karve, C. G. 550 Kasa 130 Kasinatha Upadhyaya 251 Kathākalpataru 90 Katre, S. M., and Gode, P. K. In. 31nKaumudijägara 219 Kautilya 65n, 88, 131, 132, 141 Kautuka-cintāmani 420, 480, 47,

55

Kavaraja 206, 221 Kavi Bhushan 93n Kavi Kalasa 107n, 114, 115 Kedarnath 218n, 241n Keith, Dr. A. B. 148n, 149n, 152n, 155n, 171n, 218n Kelading pavijaya 118, 120 Kelkar, Y. N. 96n Kesava, 235 Kesavasvāmī, 161, 162* Ken jin 136, 137 Keys of power 188n Kha 126n, 129 Khambata, Dr. Kershaw Dinshaw 142n Khopkar, Laksmana Pamji 54 Khuperkar, B. M. 228n Kirātārjunīya 146 Kokkoka 228n Kolate, Prof. V. B. 207s, 208 Kolhapur 203, 204e, 223 Kollapura (Kolhapur) 203 Kopal In Koran 183 Kośa 126n, 129 Kosambi, Prof. D. D. 180 Kota 201 Kothare, Balaji Sitaram 188n Kaishnamachariar, Dr. M. 149n, 159, 228n Krishnamacharya, E. 149* Krsnabhatta Arde 250, = 251, 254Kranadeva of Devagiri 150n Krsnadevarāya 169n Krana Karnamrta 152n, 158, 1540, 157

Kṛṣṇa Paṇḍita 107*, 114n, 115
Kṛṣṇa Rāṣṭrakūṭa 220, 286, 288
Kṛṣṇa-Yājñavalkya 90
Kṛṭyaratnākara 227n
Kṣemendra 151*
Kulkarni, P. V. 171n
Kumaon 255
Kumāragupta I 63
Kumārapāla 218n
Kwanlung 85

L

Laddu, Prof. R. D. 160 Laksanaprakāša 60 Lakshminarayana Rao 206n Laksmana Deśika 152 Laksmidhara 167, 169. Lane, Arthur 78 Lane, Edward William 175, 176. Lansing, Ambrose 123n Legacy of Egypt 174n, 176 Life of Hemadri 150n Lilacarita 151, 152, 157, 205, 206, 222Lindblom, Dr. Gerhard 80, 83 Lindner, B. 193n Lingana Kavi 118, 120 L'ologenese culturele 81

M

Macdonell 131
Macdonell and Keith 126n, 129
Mackay, 125
Maclagan 11
Maclagan, Maj. Gen. R., 2n
Maclean, Prof. John 180
Mudanaratna 245n
Mādhavācārya 251n, 254

Mādhaviya 245n Madhurāvijayam 110n Madhyayugina - caritra - Kosa 194n, 200n, 205n Madras 1n, 23, 29 Mahabharata 1n, 9, 62, 63, 65*, 66, 67, 86, 139, 258 Mahabharataca Upasamhara 128n Mahabhasya 127n Mahadai 205 Mahādji Scindia 51, 200, 201 Mahalaksmī 204*, 211, 223, 225 Mahanavami 3n, 5, 210n, 214 .. 220, 223 Mahanubhava 150n, 151, 205, 207.222Maharastra 205, 206, 207, 227 Maharastra-Sarasvata 90, 102n Mahaun 6., 7 Mahavira 203, 227n, 259 Mahmud Gawan 5, 6n, 7 Mahmud of Gazni 221 Mahomood Begurraz (Mahmud Begda) 2, 5, 7, 68 Majmudar, M. R. 146n Major Hay 75, 77 Mallabhatta 167n Mallayuddha 211, 223 Mallinatha 154 Manusollāsa 60n, 72, 74, 79, Mangalamālikā 246, 249 Manikrao, Prof. 96, 97 Mankad, B. L. 9 Mankar, J. L. 94n

Manyakheta 220

Mao Yuan-i 38 Marco Polo 6n Margherita, Lt. Col. Carlo de 80 Märkandeya Purana 139 Marshall, Sir John 124n, 125 Materia Medica of the Hindus 116n Maurikios 79 Maydeo, Prof. V. G. 89n Megasthenes 65n, 139 Mehta, R. N. 216n Meladi 197 Memoir (Rennell) 23 Memoirs of Baber 8 Merutunga 203, 204, 223 Meyer 231n Miller, Prof. R. T. S. 174, 175, Miniature Paintings of the Jainakalpasütra 203 Mirashi, M. M. Prin. V. V. 202n Mirza Amani 52 Mitra, Dr. R. L. 2n Mitramiśra 60, 62 Moffatt, Prof. 182, 183, 184, 185 Mohenjodaro 62n, 125, 226 Mohenjodaro and the Indus Civilization 224n, 225n Monier Williams, M. 86, 192, 193n Montandon 82 Mookerji, Dr. R. K. 64n, 65n Moolk-s-Meidan 22, 23, 24, 192 Moor, Capt. Edward 22, 26, 29, 54, 242*, 258 Moraes, G. M. 206n

Moreland, W. A. 11

Moslems In, 2n, 37

Moti Chandra, Dr. 74, 146n

Mounted bowman 57, 58, 61, 64, 65, 66e, 69, 70

Mukhopadhyaya, S. C. 65n

Mukherji, P. K. 139n

Multan 213e, 227

Muni Jinavijayaji 213n

Muni Punyavijayaji 88e

Murrell, W. L. 123e

N

Nagananda 216, 217*, 220 Nalastra (gun) le Nalika 4, 5, 7, 45, 210n Nana Farnavis 52 Nälikästra 210n Nandurbarkar, P. R. and Dandekar, L. K. 94n, 11 ln Narakacaturdasi 208, 209, 210, 223, 233, 242n, 256, 258, 259 Näräyana Shab 4, 7 Narendra Kavi 207 Narrative of the Operations of Little's Detachment Captain 142n Nasamauktika 163, 164, 165, 166, 172, 173 Nath (nose-ring) 142, 143, 144e, 145*, 146, 147, 161*, 176 Natural History 182 Natyasala 211, 224 Natyasastra 144n, 177 Nemi 126n Nene, H. N. 151n, 205 Neuburger, Albert 57n Nibandha-mālā 159

Nicolao Manucci 11, 28
Nilakantha Caturdhara In, 5, 86
Nilamatapurāna 215, 216, 220, 226n, 228, 229n, 230n, 231*, 232n, 233, 234, 235, 239
Nirnayasindhu 227n, 245n, 250, 251, 254, 255
Nizam 118, 120
Notices of Sanskrit MSS (Mitra) In
Nṛsimha 244, 254
Nurnāt 15, 27

0

Odysseus 57n
Oka, Vaman Daji 162*
Old Testament 177, 180, 181
Oman, J. C. 193n
Orme 96n
Outline of the Religious Literature of India 151n, 169n
Outlines of Pyrotechnics 36
Ovington 191
Oxford History of India 24n, 64*, 153n
Oxford History of the World
125n

P

Padhye, K. A. 150n

Padmapurana 227n, 242n, 244,
245e, 247, 248, 251, 253,
254

Pagadis 237

Pai, M. Govinda 217n

Paithan 205n

Panchamukhi, R. S. 236e, 287n

Pangarkar, L. R. 151n

Panini 127n Panipat 57, 69 Panipat, 1761 69 Pāpalallaya Sūri 154, 157 Parab, K. P. 147n Paradkar, Harishastri 87 Paramananda 103, 109, 113n, 118 Parasnis, Rao Bahadur D. B. In, 30, 52, 92n, 97 Pārijāta-dhvaja 113, 114, 115, 116, 117, 120, 121, 122 Parnalaparvatagrahanakhyana 97n, 98n, 118, 145 Parthians 60, 65, 76 Parvati Hill 51, 201 Patafijali 127n Patkar, Dr. M. M. Sn. 86n Patna-Gaya Report 53 Patwardhan, Parashuram Bhau 25e, 142 Patwardhan, Prof. R. P. 98, 99 Pavi 126n, 129 Peake 182 Peake and Fleure 62 Pelsgert's Travels 11 Persian Travel 143 Pešave-kālina-Mahārāstra 55 Peshwa Bakhar 51 Peshwa Daftar Selection 1n, 2n, 30, 120, 12ln Peterson, Dr. P. 148n, 152n, 153 Petro Paulo 11 Philippines 85 Philips, Geo. 6n Pilgrimage to Mecca 174, 186 Pisani, Dr. Vittore 79

Pithawalla, Dr. M. B. 63n Pliny 84, 182 Polo 68, 72, 79 Poros 63, 64, 65, 68, 69, 70 Portuguese 2n, 36, 38, 93n Prabandha Cintamant 203, 223 Pradhi 126n, 127, 129 Pravarasena 168 Pre-Buddhist India 216n Priyadarsika 216 Proverbs 174, 181, 184 Pudumji, Bomonjee D. 100e, 101n, 102 Punjab 213, 227 Puranic Records 202n, 231n, 241n Purusottama 99n, 100,119n, 121 Purusottamadeva 221, 228, 234 Puskarapurana 240n Pyrotechnia 33

Q

Qancon-e- Islam 144n, 158

R

Radhamadhava Vilasa-Campa 94n, 107n, 108e, 109
Raghavan, Dr. V. 214
Raghunātha Paṇḍita 12, 29, 50, 73, 79, 140, 145n
Raghurāma 239n, 254
Raghuvaṃia 117n
Rājaprainiya-Sūtra 116
Rājarāma 17
Rājanighaṇṭu 245n
Rājataraṅgṇṭi 215n, 231e
Rajawade, V. K. 95n, 98n, 107n, 108n, 207

Rajavyavahara Koia 12, 18n, 29, 50°, 73, 79, 140, 145n Ramacandra Sastri 218 Ramachandrapant Amatya 17. 29, 54, 70n Rāmadāsa 47, 48, 49, 93n, 117n, 118e, 119n, 121 Ramaji Mahadeva In, 30 Ramananda Tirtha 167n Ramanayya, Prof. 8 Ramanujaswami 218n Ramayana 47, 48, 62, 65, 139 Ramial and Zaddoo 215n, 229n Ranade, M. G. 97 Banadullakhan 3 Randhawa, M. S. 62e Rangachari 202n Rao, Lakshminarayana 206n Rao, Suryanarayan 202n Ras Mala 2 Raśmi 126n, 130 Rastovtzeff, M. 74 Rastraudhavamia- mahakavya 4 Ratha 128n, 130, 141 Ratirahasya 228n Ratnavall 216 Ray, Sir P. C. 1, 2, 3n, 9 Ray, T. N. 218e, 219 Recht und Sitte 193n Religious of India 193n Religious Thought and Life in India 192 Rennell 23, 24, 30 Rgveda 71, 123n, 126e, 127, 129, 130n Rgvedi 187, 188, 206n, 214n, 217

Rise of the Maratha Power 97
Rites of the Twice-Born 195
Roberts, C. H. 176
Roe, Sir Thomas 146
Roman Forschungen 193n
Romans 124, 125n
Ross, Sir E. Denison 8
Roy, Prof. N. B. 152n
Rudrakavi 4, 7
Rukmini-Svayanvara 46, 207
Russell Smith, 51, 62, 67n

S

Śabdakośa (Marathi) 51n, 55, 90. 145n Sabha-srigara 89, 90 Sabuktigin 1530 Sachau, E. C. 213n Sacred Books of the East 198 Sadāšiva Nāyaka 202 Sadi 40 Sabasralinga lake 204 Sakambhari 148 Sakata 127n Säkuntala 66n Saletore, Dr. B. A. 41, 110n, 201 Salmanasser III 76, 78 Saltpetre 3n, 9, 32, 37, Sambhají 4, 17, 101n, 106, 107, 109, 110, 118, 1140, 115, 120, 122 Sambhuraja-Carita 4, 7, 105n. 106, 1070, 109, 112, 1180, 114e, 115e, 120 Sambhu-vilāsikā 115 Samgraha-cildamani 145, 158 Samrajyalaksmi 211, 225

Sanchi 63, 64n, 75, 128e, 144n Sandeśarāsaka 213s, 221 Sane, K. N. 51, 94n, 102n, 200n Sane, K. N. and Modak, J. B. 99n, 199n Sankamadeva 206n Sankarācārya 155, 156, 1670, 168, 169, 170, 171e, 172*, 173, 178Sanskrit - English Dictionary (Apte) 228, 235, 239 Sanskrit Poetesses 11, 28 Sāradātilaka 1520, 155 Sarasvatipurana 204 Sardesai, Rao Bahadur G. S. 930, 105n, 114n, 115n, 121 Šāriraka-mimāmsā-bhāşya 169 Sarker, J. N. 9 Sarkar, Sir Jadunath 95n, 98n, 114n, 115n Sarngadhara 58n, 148, 149 Särngadharapaddhati 145*, 157 Sastri, Natesa 193n Sastri, Pt. S. S., and Ayyangar, T. R. Srinivasa 167n Sastri, T. Ganapati 217n Satara 92*, 94, 97n, 105n Saundaryalahari 167*, 169*, 170, 171, 173 Sawai Madhavarao 55, 200 Scythians 57, 58, 62, 66, 71 Seitz, Dr. H. 80 Sen, Dr. Surendranath 92n, 95", 96n, 117n Sett, M. K. 109a Sewell 202n Sewell, Col. 124n

Shah Jahan 93n Shahāji 107, 108, 115, 118 Shahu 114n, 120, 122 Shaikh, Prof. A. K. 40 Shamshastri and Lakshminarayana Rao 206n Shastri, Dr. B. Sama 88 Shastri, Pt. Srinivas 110n Shejwalkar, Prof. T. S. 69 Sherwani, Prof. H. K. 60 Shivaji, the Great 4, 11, 12, 17, 20, 48, 50, 70, 73, 79, 92, 93e, 94e, 95e, 96e, 97n, 99, 100*, 101*, 102= 103*, 104, 105e, 106e, 109, 111, 114n, 115n, 117n, 118, 119n, 121, 140, 145*, 146 Shivaji and hts Times 115n Shivaji Souvenir 93, 96, 98n, 102n Short History of the Chinese People 37 Shrigondekar, G. N. 159 Shukla, S. P. 116n Siddharāja 203, 204, 213n, 223 Silahara 204 Sinīvālī 235 Śivabhārata 98e, 99, 100, 103e, 109, 113n, 118, 119n Sivacaritravettasamyraha 118n Siva Chatrapati 95, 96n Śiva-digvijaya 95, 96, 104, 105*, 111 Sivakāvya 119n, 121 Sivarama 217 Skandapurāna 227n, 245n.

Sling 82, 83, 84, 85, 86, 87, 88, 89, 90, 91 Smith, Vincent A. 24n, 62n, 64*, 75, 77, 153n, 194n Smithsonian Report 57n Social and Political Life of Vijayanagar 41, 201 Sohoni, K. V. 51, 200n Somadevasūrī 214, 220, 238 Somanatha 159 Someśvara 60n, 72, 73, 79, 140 Sources of Vijayanagar History 110a Sridhara 51 Srīdhara 90 Sridhara-caritra 90 Śrī Harşa 216 Srīpati 206*, 207, 220 Srīrangadeva 202 Srirangapattan 3n St. Petersburg Worterbuch 228 Stein, Sir Aurel 85 Stevenson, Margaret 193, 195, 204Stirrup 13, 71, 72, 73, 74, 75, 76, 77, 78, 79, 80, 81 Storia do Mogor 11 Strabo 85 Subhāşita-hārāvali 105n Subhāşitaratnabhāndāgāra 147,159 Subhaşitavali 148n, 152n, 153, 167n Sukharātri 228, 229, 234, 237, 239, 240e, 241n, 251, 254 Sukhasuptikā 215, 226n, 228, 229e, 231, 232, 233, 234, 235, 239, 247n

Sukra 140
Sukraniti 1, 4
Sukranitisāra 208n
Sukthankar, Dr V. S. 9, 86
Sūktimuktāvali 149*, 150*, 151*, 155, 171
Sultan Shāh Rukh 3n 41
Sumatra 41, 42, 47, 85
Surat 9, 89, 105n*, 106, 107, 114, 115
Suśruta-Samhitā 86, 87
Suvasantaka 219
Sword 61, 68, 70
Syandana 126*, 130n, 140

T

Tahkik-i-Hind 221 Taittiriya Brahmana 139 Tambūla 211, 224, 225 Tanjore MSS Library 5n, 45 Tarikh-i-Shivaji 95n Tavernier 50, 51, 143*, 158 Tawney, C. H. 203 Technical Arts and Sciences of the Ancients 57n Teen Ken 135, 137 Terry, Edward 146°, 185 Tentons 80 Thomson, J. S. 85 Thucydides 84 Tikekar, S. R. 255 Tilak, Lokamanya B. G. 98n Tipu Sultan In, 25, 30, 54, 143 Tirumalai Nayaka 202 Tiruvannamalai 259 Tonkin 77 Travels (Barbosa) 42

Travels (Bernier) 13, 14n, 29, 49, 68, 96n
Travels (Mahaun) 6n
Travels (Verthema) 41
Travels in India 50, 158
Travels in Persia 23, 143
Travels of Fa-hsien 130n
Tribhuvanamalla 155, 206
Trikandaiesa 221, 228, 229, 234, 239
Tukārāma 12, 28

U

Turkoman 63, 67, 73 Turks 2n, 18n, 68, 69

Tut-amkh-amen 85

Unger, Eckhard 76, 78 Unwalla, Dr. J. M. 75 Upadhye, Dr. A. N. 170n, 227n Urdhvareshe, Prof. V. G. 17, 70n Ustad Ali Kuli 8 Uzbeks 69

V

Vad and Parasnis 117n
Vāgbhaṭa 87
Vahnipurāṇa 247n
Vaidya, C. V. 128n
Vaidya, Prof. N. V. 116n
Vaidyanātha 149s, 151, 152n
Vaiṣṇava Faith and Movement in
Bengal 252, 253n
Vakaskar, V. S. 98n
Vallabhadeva 148n, 152n, 153,
157, 167n
Vāmanapurāṇa 227n, 242n, 244,
248, 249, 254
Vannucio Biringoccio 33

Varahapurana 240n, 241. Varanga-carita 170n Vardhamanapura 203 Väsantikā 242, 243 Vatsyayana 218 Vedic Index 126n, 129, 130 Vedische Opfer und Zauber 193n. Vegetius 85 Vendidad 88n Venidatta 12 Venkateśa Kavi 163, 166 Venkobarao, B. 159 Verma, Dr. Siddheswara 72, 78 Verthema 41, 42, 84 Vidyasagara, J. 1n, 214n Vijayanagar 3e, 5e, 6, 7, 8, 41, 42, 47, 67, 110, 169n, 202, 208, 210n, 214n, 223, 227 Vijayanagar Third Dynasty 8 Vikramaditya 190, 217 Vikramānkadeva-carita 1550, 171Virabhadra 241n, 254 Viramitrodaya 60 Visnudharmottara 60 Vratakhanda 206n, 222, 229n, 242n, 247n Vrataratnakara 255 Vrddha-Manu 227n, 245n Vrddha-Vasistha 245n de Vreese, K. S. J. M. 216, 230n Vrndavana 252, 253n

w

Wang Ling 87 Wang Ming-hao 88, 41 Wang Ming-hao 41 War in Ancient India 60, 189n
Ware, Prof. James R. 37, 38, 14
Watt, Sir George 117
Wheeler, J. Talboys 65n
Wheeler, Dr. R. E. Mortimer 74
Wilson 60°, 202n
Wilson, H. H. 193n
Winternitz 127n, 152, 215n, 231
Woolley, 125
World Pictorial Gazetteer 213n

X

Xenophon 80 Xerxes 65n

Y

Yakşarātri 218e, 219, 221, 227,

228, 229, 234, 235, 237, 239, 240n, 241*, 243, 244, 246n, 250, 252, 254

Yantrasala 3

Yasastilaka Campū 214, 220

Yaśodhara 218n, 219, 227, 228e, 229, 234, 239, 240n, 241n, 250

Yemen 84 Yule and Burnell 20, 53, 72, 190 Yung-lo 7, 89

Z

Zain-ul-Abidin 10, 17, 21, 42 Zimmer 129

When almost to He (6), 182m When 2 at 1, June 11, 87, US, 14 When the Green 11, 2 When he, J., This profile

Vicesia, to A. S. Mariner 74. When 50*, U.Sr.

and the first

Western by 1915, 151, 9162, 911 Western Planes or Contract 9152

N NOW AND ADDRESS OF THE PARTY OF THE PARTY

List moreon La

Alexand Dist

702 ,102 ,010 ,010 kning lett

terminal dis

2007, 2005, 181, 205, 267, 200, 2009, 1417, 1419, 2449, 2468, 2001, 251, 161

Calabra 1

Charle by a recumber

And the The Table of the Wallet

Tomas St.

Yers and Darmell 20, \$0, 72, 100) Year-left 7, 24

Ē

Este-of-Alum 10, 17, 21, 41

Subject - Index But him .. April 2 count and

But a surjust his may be seen a sadisf

LEUGAN BUT STANCE

327117

(By N. A. Gore)

Adityapurdua, Sukhasuptivrata (= Divali) in, 229-231.
Africa, use of sling in, 82.
Agra, Great Gun at, 24n.
Ahmedabad, date of the foundation of, 89.
Ain-I-Akbari, four varieties of nose-ornament in, 178.
" on artillery of Akbar 14ff.
Ajñapatra of Ramacandra Amatya, date of, 17, 54.
" " references to fire-arms in, 17 ff.
Akasabhairava-tantra, date of, 5.
" " references to guns in, 5,
Akbar, Ain-i-Akbari on the aztillery of, 14 ff.
Alberuni, date of, 231,
Analadhyaksa = artillery officer, .1 3.
Anandalahari, authorship of, 172n.
Anandalahari or Saundaryalahari, Commentaries on, 167n.
Animals, domesticated, role in Indian history of, 62, 62n.
" in the early Aryan home and settlement, role of,, 68m.
" " war, in India 681.
Antiquity of some types of bows 57n.
Archery, ses bow.
Army equipment during the Maurya period 64n.
Artillery and its equipment, Sanskrit equivalents of, 8.
Artillery makers, references to Italian, 10ff.
Artillery of Akbar, Ain-i-Akbari on, 14if,
Artillery of Aurangzeb, Bernier's remarks on, 13,
Artillery officer = analadhyakşa 8.
Aryan family, home region of the ancient, 63n,
Aryan home and settlement, role of animals in early, 63n. Assam, nose-ornaments in, 157n.
Assirian war-chariot, description of a sculptured relief of 125
ANNIETH WALL COMMITTEE OF THE LOT WAS A STREET OF THE LOT AND

```
Baber's use of guns and gunpowder ... 2.
Bakhars, dates of several, ... 105n.
Bandages for wounds, 14 kinds of, ... 86.
Banner of the Marathas see Parijata dhvaja, Bhagava Zenda, and Jari-
   patka.
Battle of Hydaspes, date of, ... 64.
Begds, Mahamud, date of the death of, ... 68.
Begurra, Mahmood, gunners and musketeers employed by ... 2.
Bernier's account of mounted bowmen in Dara Shukoh's army ... 69
   " references to fireworks, ... 49.
   " remarks on Aurangzeb's artillery, .... 13.
Belgam, Mahmad Gawan's campaign against, ... 5.
Bengal, Mahaun's (a Chinaman's) account of, ... 6.
Bengall language ... 7.
Bhagavata Purana, date of an illustrated Ms of ... 74.
               dated M of, ... 146.
Bhagva Zenda ... 114n, 115, 115n.
           Bombay Gazetteer on, ... 117n
           = gairika patta ... 119n.
                                    Aller ... Protein deposited in
           of the Marathas ... 120-122
           ses also Pārijātadhvaja.
Bhanubhatta, see Harikavi
Bhayani sword and a sword in Shri B. D. Pudumjee's possession ... 101.
            compared with Pandyan sword ... 111
  M. ...... (82.3)
            Dr. G. S. Sardesai on, .... 105n ff.
        92
            Harikavi on, ... 92-112.
            'journalistic' description of, ... 96ff,
            picture of, ... 100, 100n.
        -
           Prof. Manikrao on .. 96 ff.
        **
            references recorded by S. M. Edwards to, ... 92n.
            Sivabharata refers to, ... 103,
        29
            Sivadigvijaya on, ... 95 ff.
Bhattoji Diksita, date of ... 244n. B. ... attendading a selling A.
Bhau - blja, description in the Bhavisyottara Purana of, ... 206n.
Bhusandi (= a musket or a cannon ?) ... 11 ff.
Bihar, manufacture of fireworks in, ... 53 If.
Bijapur, Moolk-q-maidan gun at, ... 22 ff. injunta a ministration
```

Bijapur guns, Capt. Edward Moor on, 22.
Bilvamangala alias Lilläsuka, date of, 151,
Bow and arrow in ancient India 62 ff.
use of, by Maurya army 64n.
" antiquity, of some varieties of, 57n.
" composite, 57n.
" compound, 57, 57n.
" Neuburger's remarks on, 57n,
" Pathan, 65n.
, see also Bowman mounted,
Bowman, mounted, on Indian battlefields 57-70.
Bullock-cart. Indian, its pre-historic and Vedic ancestors 123-128.
Bulls, remains at Mohenjo-daro of humped Indian, 124n.
Cakradhara, founder of the Mahanubhava sect, date of 205n.
Campā, wife of king Sambhāji, 114, 114n.
Campabharata date of, 8, 59.
description of gun-fire in, 8.
Canara and the Canarese, historical and descriptive perticulars of, 143.
Cannon and gun-powder in Indian warfare, use of, 2.
Cannon-ball = golah 1n.
Cannon-balls, Tukārāma's reference to, 12,
Carriage-manufacture in the Vedic period and ancient China 129-141.
Carriages in China, details of the manufacture of, 134-38.
" " different varieties described 133 ff.
Cart, terra-cota toy-carts at Mohanjo-daro 125.
" miniature copper-cart at Harappa125.
Cavalry and horsmanship, Sanskrit words for,, 78,
Ceremonial usages of the ancient Chinese 132.
Chariot, Assirian war, description of a sculptured relief of, 125.
" in the Mahabharata, description of 128n.
" Vedic, description of, 126 f, 129 ff.
terminology connected with, 130 ff.
Chariot with five stories in Magadha 189n.
Charlots, description in Kautilys of 181.
in ancient India 139.

```
China and fireworks ... 36, 37, 38, 89,
           fire-wespons in ... 38. 11 ... to also selected and allow the description
           use of sling in, ... 89, 90, 90n,
           see also carriage-manufacture and carriages.
Chinese, ancient, ceremonial usages of, ... 132.
Chitnis Bakhar, date of, ... 94.
                                                                             did... officialis.
Chitragupta Bakhar, date of, ... 94n.
                                                                      domining ... br. Ovus
Chymia, a journal devoted to the history of Chemistry ... 31, 32.
Customs of the Moosulmans of India ... 144.
Cutcha-Bucha, a gun named, ... 24.
                                          Dipāvali see Divall.
Divall = Jakkharatti acc. to Hemacandra ... 218.
              = Yaksaratri in the Kamasatra ... 218 ff.
               a description of a royal, in the Akasabhairava-Kalpa ....
     -
              Calculation and the Commission of the Commission
                       by Alberoni ... 218 ff,
     31
                       , in the Ain-i-Akbari ... 201.
                       , in the Nilamata-purana ... 215 ff.
              " in the Yasastilaka Campü ... 214 ff.
                       " of the Mahanubhava sect 205 ...
                a detailed description of, ... 195-199.
               as observed by Vaisnavas of Bengal in 1500 A. D. ... 252 ff.
     .
                an inscriptional reference to, ... 202n.
               and fire-works ... 200, 201.
               at Kolhapur in 1805 A. D. ... 203 ff.
     **
                at Koță (Kotah State) ... 51, 200 ff.
               customs in the Tanjore district ... 255 ff.
               Dravidian, ... 189n. ... expensit to her-veryer sundam ...
               drawings, symbols used in, ... 190.
               festival and fireworks ... 50, 51, 53, 54.
            modern, and Sukhasuptika, ... 228-238.
      *
                             origin of, ... 217.
                             some notes on the history of .... 187-227.
                             some Paranic texts on the observance of ... 289-260.
                folk-lore, B. A. Gupte's article on, ... 190.
                in the days of the Vijayanagar empire ... 202.
                in the Punjab ... 213.
```

" information about, in the Keys of Power 188n.
" of the Jains 193, 227n.
" " a miniature painting about, 203.
a reference to, in a Commentary on the Justigarainamala 207.
" " in a Kannada inscription 206.
" in a Mabānubhāva work 207.
, in the Bombay Gazetteer 189n.
, in the Encyclopaedia of Religion and Ethics
189n.
" in the Dharmasastras227n, in the Juanes vari
208.
" in the Puranas 227n.
" Siamese, a description of 199.
some foreign notices of. 191 ff.
Dhanneyeda datad Ma of 58n
Anéanasa AT
Siva 58n
Some anthorities on, 60.
Viracintāmani, dated Ms of 60n.
Distance Pola data of 180
Demonstrated entired a role of in the Indian history 69 69n
and the state of t
Egyptian female ornaments 175.
Egyptian nose-ring and its Biblical ancestry 174-76.
Egyptians, An account of the manners and customs of the modern, 175.
Eknatha's references to the fireworks 46 f.
Ellora caves, date of, 236. Encyclopaedic work, a Sanskrit, 5.
English fireworks in India, a Marathi article on, 52.
European records and use of gun and gunpowder 2.
European records and use of gun and gun and gun and all questions of lawner see Divall.
Feast of lamps, see Divall. Festival, Great Fireworks, of Japan 36.
restival, Great Fileworks, and any
Festival of Mahanavami 214n. Festivals and fasts, Hindu, literature on, 193n.
Festivals (and Vratas), Hindu, a list of, 187n.
Festivals, Hindu, a classification of, 189, 192,
Festivals see also Hindu Holidays.
COTTANT SOL MINA TANKA CANALANTA

```
Fire-arm called rocket, description of, 25.
Fire-arms at Peshwa's time p. 26 ff.
Fire-arms, Hobson-Jobson on, pp. 20 ff.
in India, chronological table of the manufacture & usa of, 27-30.
       in India, manufacture & use of, 10-30.
       in Kashmir, date of first introduction of, p. 10.
        in the Mahabharata, Dr. Balkrishana's paper on, p. 9.
       no reference to the manufacture of, in the Ajffapatra, p. 20.
        Sanskrit words for, p. 13.
        use by the Marathas, p. 17 ff.
        see also guns and gunpowder.
Fire-works, a Persian work by a muslim king of kashmir on, 10.
Fireworks and China, p. 36, 37, 38, 39.
        & Divali p. 53.
        & Gujarat, p. 42.
        & Kashmir, p. 41.
        & Sumatra, p. 41.
        & the Akasabhairava-Kalpa, p. 45.
        & Vijayanagar, p. 42.
        at a marriage Ceremony, p. 53.
       Bernier's references, to p. 49.
        Bibliography of Mss and printed sources, pp. 35-36.
        dated references to, pp. 33-35.
        different varieties of, in India p. 86.
        display at Lucknow by the English, p. 52.
        display of=Bana-vidya, p. 210n.
        during Peshwa period, p. 55.
                                 AND IN PURCEYUS AND INC.
        English, in India, a paper in Marathi on, p. 52,
        festival of Japan, p. 36.
        formulas for, p. 54 ff.
Fireworks History of, by Brock, p. 33.
Fireworks in Behar, manufacturers of, pp. 58 ff.
Fire weapons in China, p. 38
Fire-works in India, History of, pp. 31-56.
```

Fireworks in Poons during the time of the Peshwa, p. 51,
" ingredients used in India for the manufacture of, p. 43-44.

" " Kautukacintamanı and the manufacture of, 48-44.

Fireworks, Lanka of, 51,2 to all the selections and
" Marathi books on, p. 55.
, materials used in the manufacture of p. 54.
" points of historical interest from an article in the Encyclopaey
dia Britannica on, pp. 32-33.
" references by Marathi poet Sridhara to, p. 51.
by Ramadasa to, 47 f
" referred to by Saint Ekanatha, p. 46 f.
" reference by Tavernier to, p. 50,
" " in Marathi literature to, pp. 46.
" in the Rajavyavaharakos'a to, p. 50.
" " use of, at Vijayanagar, p. 3n,
" used to rout bandits, p. 44n;
" " Varieties of, p. 55-56.
Fing see Banner
Flags of South-Indian Muslim rulers, p. 118, 120,
Ganri postess date of p. 19
Gophana, see Sling
Gujarat & fireworks, p. 42.
history, first mention of artillery & musketry in, p. 2n. "
Con - Waldston n 1
pasting of n. 8
Guart of Aura o Odn - Un of the state of the
invented by Berthold Schwartz, p. 32, 36.
Malabar n 24
morning and evening, p. 25.
named Cutcha - Butcha, p. 24.
Gun of very big size at Dacca, p. 23, 24.
ref. in आकारामेखकस्य to, p. 210n.
fire, description of, in the Campabharata, p. 8.
Gunpowder = agni-Curna, p. 1. and
Gun-powder, date of the first English manufacture in India of, In-
Gun with a light barcel singhunala, p. ln.
Gunpowder in Indian warfare, use of, p. 2,
Gun powder, use in the Deccan of, p. 5.
Gun pondor, uso in the Contract of

```
Gun and gunpowder and European records, p. 2.
               ref. in a Sanskrit poem to, p. 3.
               used by Baber in 1528, p. 2
Gunners, use of by Mahamood Begurra, p. 2.
Guns - handguns, p. 8.
      & Cannon - balls, ref. to, in the Sambhurdjacarita p. 4.
      ... Cannon - balls, ref. in a Sanskrit poem to, p. 5...
      " gunpowder see also fire - arms.
                 in India, use of, pp. 1-9.
                rel in the Sukranlli to, p. 1.
Gun
Guns at Bijapur, Capt. Edward Moor on, p. 22,
     bearing inscriptions, p. 8.
     in Bengal, earliest refs. to, p. 7.
     Tipu Sultan and manufacture of, p. In.
Hamsamitthu a. of Hamsavilāsa, date of, p. 145n.
Harsavardhan of Kanauj, date of, p. 216.
          works of, p. 216.
Harikavi and the problem of the Bhavani sword, pp. 92, 112,
Hari Kavi, date of, p. 102n.
          ref. to guns and Cannon-balls by, p. 4.
           works of, p. 105n.
          works of, p. 115.
Harivijaya of Śridbara, date of, p. 90.
Hemadri, date of, p. 205.
            date of, p. 231.
Hindu Holidays by B. S. Kothare, p. 188n-
         .. a list of, p. 188n.
History of Fireworks by Brock, p. 33.
                in India, pp. 31-56.
          the Stirrup in Indian and foreign horsemanship, pp. 71-81.
Hobson-Jobson on the fire-arms, p. 20 ff.
Horse, date of the domestication of, p. 62n.
Horse, the home of, p. 71.
        part played in man's affairs in Eurasia, p. 57 f.
Horses, varieties of, mentioned in the Rajavyavaharakośa p. 18n.
       -furniture discovered in South Kores, p. 81.
```

O. P. or Str. archive Name of the

Horsemanship, see under Cavalry.

India, date of Scythians' invasion of, p. 62.

- different varieties of fireworks in, p. 26,
- History of fire works in, p. 31-56.

Indian battlefields, mounted bowmen on, pp. 57-70.

soldiers fighting in Europe in 5th Cent. B. C., p. 65n.

Indo-Chinese art & the Stirrup, p. 77.

Inscription, Kannada, ref. to Divall in, p. 206.

Marathi, on a Sword of Shahu, p. 92n.

Inscriptions, dated, of Krsnadeva of Devagiri, p. 150n.

on guns p. 8.

Inscriptional reference to Divall, p. 202n.

Italian artillery makers, references to, p. 10, f.

Jakkaratti see also Yaksaratri.

in the Defindmamald = Divall, p. 228.

Japan, great fireworks festival of, p. 36.

Jaripatka, p. 115n.

Jari - paţkā, contemporary refs to, p. 117 f.

" dated references to, p. 120,

Jaripatkā, use of, p. 114n.

Jiidnesvart, ref. to Sling in, p. 89.

Jyotigaratnamālā, date of, p. 206.

Kalasa, Kavi, guru of king Sambhāji, p. 114.

Kalpadrukośa, date of, p. 90.

Kalhana, date of, p. 231.

Kampardya caritam, a historical poem, p. 110n.

Kanfkirava-narasardja-vijayam, date of, p. 8.

Kashmir and fire-arms and fire-works, p. 10.

" fireworks, p. 41.

Kathākalpataru, a Marathi work, date of, p. 90.

Kautukacintāmaņi and manufacture of fireworks, p. 48-44.

Kāmasūtra, date of, p. 218n.

yakşaratri in = Divâli p. 218 f.

" Virabhadra's metrical com. on, p. 241n.

, yakşarātri festival in, p. 228,

Kešavasvāmin, date of, p. 161.

Kharoshthi numerals, p. 66.	Hermaniship and meter Cayairy
" script, p. 67.	india, date of Soythiam" invasion of p. 69.
Khmera art and the stirrug p,	Tre eliment variation of firewards of The
Kirātārjunīya, a dated Ms of a	com. on, p. 146 and h. warmell
Korea, South, discovery of Ho	ree-farmiture in, p. 81cm, ablact that public
Kotā (in Rājasthan) and fire	works, p. 51.
Kṛṣṇabhaṭṭa Ārḍe, date of, p.	250. IV 4 grant on & no amail -old
Kṛṣṇadeva of Devagiri, some	lated inscriptions of, p. 150n.
Kuberapūjā in Kumaon, p. 25	School to because on a distance of the last
Laksmidhara, a. of a com. on	the Saundaryalahari, date of, p. 169a.
	s of, in South India, p. 202n.
Lane, Edward William, a. of J	Description of Egypt, p. 176n.
	Man and least makern rederinger to intelligent
Lifa Caritra, date of, p. 205.	Linkspuld coto ou description
" description of Di	validn, p. 205, particular attent
Lucknow, display of the firew	orks at, by the English, p. 52,
	ocem, p. 110n,
Mahabharata, fire -arms in, D	r. Halkrishna's paper on, p. 0.
	vmad, pl. 65, d to mander both
	orse in the army, p. 68. a . a . a . a . a . a . a . a . a . a
	reference to mounted bowmen in, p. 67.
Mahanavami festival, p. 214n	Agriculture of the detect, p. 2005.
Mahanubhava sect, date of the	foundation of, p. 205a.
	e, p. 24, 25. 00 4 Jane 1
Mallinatha, date of, 154.	Edge of the emblyopedial's
Manners and Customs of the m	odern Egyptians, An account of, p. 175.
Manasollasa, date of, pp. 72, 1	40. So that program with the margaret light &
Marathas, use of fire - arms b	y. p. 17 ff has recognited the similar
	55 the parameter
	of Shahu, p. 92n.
	orks, p. 53.
scene, a coloured pic	ture dated 1648 A. D. of, p. 107n.
Match lock (= revolver) 7, p.	11.12 q the disministration of
	nt during, p. 64n.
Mines, use of, in the Deccan, I	. 50 Per on beating and and and
Moolk - a - Meidan gun at Rii	anne n 92 08

Moor, Capt. Edward for guns at Bijspur, p. 22. proper - proper - aligned		
Musketeers, use of, by Mahamood Begrra, p. Q.		
Muslim flags mentioned in Keladingpavijaya, p. 118, 120. questil personal		
Mounted bowman and the battle of Panipat of 1751, p. 691,		
and the Mahabhagata, p. 65, 86, and the averaged		
"1 In Dark Shukoh's army, p. 69, 1 or an analysis and 1		
" in Kashmir, pictures on tiles of, p. 66.		
" (archer) original home of, p. 67n.		
Nagananda of Harsa, ref. to Divall in, p. 216.		
Nath (Hindu nose-ornament), antiquity of, 142-160.		
Naraka-caturdasi, expl. of, 258 f		
Nilakantha Caturdhara, Com. of the Mbh., date of, In.		
Nilamatapurana, date of, p. 215, 229n, 239.		
descr. of Divall in, p. 215 f.		
Nilamatapurāņa, Dipamālā in, = Divāli, pp. 229-31.		
Nirnayasindhu, date of, p. 245n, 250.		
Nose-ornament, antiquity of the Bindu, p. 142-160,		
Nose-ornament, four varieties in Ain-i-Akbari, p. 178.		
ii ii dringii, arti in to resound oni pr 13311.		
" Hindu, its past and present, pp. 177-179.		
# # # III III III III III III III III I		
" in Assam, p. 167.		
" in South-India, p. 159.		
" " Hindu, two religious poems on, p. 161-166.		
" references in works ascribed to Samkaracarya, pp.		
167-178.		
Nose-ornaments in India, N. N. Dasguta's article on, p. 148n, 152n.		
" -ring, Egyptian and its Biblical ancestry pp. 174-176.		
" " Hindu, probably adopted from savage-tribes, p. 177.		
Nose-ring in the old Testament, pp. 180-186.		
Nose-ring, Muslim, a deser. of, pp. 174, 144 f.		
Old Testament, nosa - ring in, pp. 180-186.		
Pāṇḍyan sword, description of, p. 110, 111,		
Panipat battle of 1761 and mounted bowmen, p. 69 f.		
Pārijāta flower stems used to make orange colour, p. 115, 116n.		
Părijatadhvaja - Bhagva Zenda, p. 114, 115 f.		

Parpila - parvata - grahapilkhydna, date of, p. 98n, 145n.
Pārijāta dhyaja of Sambhaji, pp. 113-119.

Persia, Stirrup in, p. 78.

Persian rendering of Sivadigvijaya, p. 95n.

Peshwa and fireworks at Poons, p. 51.

Peshwas, references to fire - arms at the time of, p. 26 f.

Peshwa period, fireworks during, p. 55.

Polo, date of introduction into Persia of, p. 72.

- " detailed description of, p. 73.
- Sans. word for, p. 72.
- ., Persian word for p. 72.

Prabandha - Cintămani, date of, p. 208.

Prataparudradeva of Orissa, date of, p. 43.

Pyrotechnia, a work on fireworks, date of, p. 33.

Pyrotechny, use of, at Vijayanagar, p. 3n.

Rādhāmādhavavilāsa campū, date of, p. 108.

Rajputs and the use of the stirrup, p. 16.

Rajavyavahārakośa, date of, p. 12, 73.

Rajavyavahārakośa, references to fireworks in, p. 50.

Rāmadāsa's reference to fireworks, p. 47 f.

Rāsa Mala, ref. to gunners and musketeers in, p. 2n.

Rasis, date of the use in India of, p. 241n.

Rastrakūta Krsna I, date of, p. 286.

Rästraudhavamsamahākāvya, date of, p. 4.

ref. to guns and cannon balls in, p. 5.

Rocket, a (fire-arm), description of, p. 25.

Royal poetess Gangadevi and her historical poem, p. 110, 110n.

Sabhā-irngāra, a dated Ms of, p. 89.

. date of, p. 90.

references to Sling in, p. 90.

Sabhāsad Bakhar, Translation by Dr. Sen of, p. 92n.

English trans, of, by J. L. Mankar, p. 94n.

date of, p. 94n.

Saddle, Pahalvi word for, p. 76.

the probable origin of, p. S1.

Sahāji, Sanskrit description of a sword of, p. 107n, 108, 109.

Sakas as mounted bowmen, p. 71.

or Scythians, date of invasion of India by, p. 66.

Sambhaji, a Sanskrit poem on, p. 4.

" garu of, p. 105a,

Sambhuraja - carita, date of, p. 105n, 106.

, ref. to guns and Cannon - balls in, p. 4.

date of, p. 4.

Samkarācārya, date of, p. 169.

a list of 'not genuine' works of, p. 171n.

refs. to Nose-ornament in works ascribed to, pp. 167-173.

Sandesardsaka, date of, p. 213n.

ref. to Divall in, p. 213.

Sanskrit historical poem, p. 110n.

words for artillery and its equipment, p. 3.

, ,, for Sling, pp. 86-7.

work on manufacture of fireworks, p. 42.

Śaradatilaka, date of. p. 152, 155.

Śārnga bow, description of, p. 58 f.

Saundaryalahari or Anandalahari, Com. on, p. 167n.

Scotland, Stirrup in, p. 78.

Script, Kharoshthi, p. 67.

Sculptures depicting mounted bowmen, p. 67.

Scythians see Sakas

" [or Śakas] invasion of India, date of, p. 62, 66.
Shivabhārata, date of, 103, 118.

References to Bhavani Sword, p. 103.

Ślvadigvijaya, date of, p. 95n, 105.

and Tärikh-i-Śivāji, p. 95n.

Shivaji, date of coronation of, p. 103.

" of the death of, p. 105.

an embossed representation of a celebrated episode in the life of, (release of the daughter-in-law of the Subsdar of Kalyan) p. 101n.

Shivaji, early pictures of, p. 96n.

Shivaji's forts, James Douglas on, p. 97n

Sind, date of Muslim conquest of, p. 73,

Shivaji's swords, notes on the subject of, p. 101,

Śivakāvya, date of, p. 119n.	The common boundary of TL
" in Sanskait, date of, p. 99	a reach among an w
Sling in India and other countries, histor	v of no 82_01
" information in the Encyclopaed	is Britannies on n 92 f
Sling is a Phoenician invention, p. 84.	Of a december when a Manager
" Pahlvi word for, p. 88n.	Commence of the commence of th
" reference in the Jffanesvarl to, p	SON Through
Sk. words for, pp. 86-7.	Sill of the winds of the second
" summary of papers on, by Dr. Li	indhlors on 00 De
Sling as a weapon in war, p. 82, 83.	mantom, pp. 83-86.
	at the application of the artist and
" references to fireworks by. p. 5	To Hart he has
Stirrup, date of the oldest, p. 76.	II al annual la la contraction de la contraction del contraction de la contraction d
" the first mention of p. 79, 80.	Constitution of the second
" in Central Asia & China, date of	Un 74 75
" in the Khmer or Indo-Chinese	Art. p. 77
" in Indian & foreign horsemansh	in history of no 71 91
" in Persia, p. 78.	the minor your plant 7-015 minor in
and the linguistic spide and a	The state of the state of the state of
, and the linguistic evidence for, p	78 20 4 4 4
" in South Korea, p. 81.	Budge, Kharadinhiya UV.
, in Turkistan, p. 77. 170 .q	The state of the s
" modern Persian and Arabic word	for. p. 75
" Sans. word for, p. 72, 74.	P. 10. MINE SERVICE AND ADDRESS OF THE PERSON NAMED IN COLUMN
" sculptural evidence for, p. 75.	minimum panas and
H THO DOORS ON, IN CO.	the of \$100 to the contract of
Subtraction to Divan of D. 24	A CONTRACTOR OF THE CONTRACTOR
Sumstra and lireworks, p. 41	the same of the sa
Saktimuktāvali of Jalbana, date of, p. 140,	of the special party of the second of the Action
Sultans of Gujarat, warfare methods adopt	ed by n. 69
Sword of Shahu at Satara, p. 92, 92a.	in the state of the state of
" of Roman Shape, p. 65n,	through early business of 50 to
superiority of, on the battle-field,	p. 61
Swords with inscriptions, p. 101n, 87 -4 3	O Brace to the college of the country of the
Tavernier, references to fireworks by, p. 6	O. will me make places of the Africa

Taxes on Saltpetre and Sugar, p. 9. Tipu Sultan and manufacture of guns, p. In.

Trikandaseşa, date of, p. 239.

Tukārāma, Saint, date of, p. 12.

probably refers to cannon - balls, p. 12,

Tulja Bhavani sword, p. 94, 96.

Turkistan, Stirrup in, p. 77.

Varangacarits, date of, p. 170n.

Vaidya, Govinda, a. of कंडीरवनरसराजविजयम् p. 3n.

Vallabhadeva, a. of Subhāşitāvali, date of, p. 167n.

Vahni-cūrņa (= gun-powder). p. 12.

Vehicles, King's, Varieties of, p. 140n.

Venidatta, date of, p. 12.

Vijayanagar & fireworks, p. 42.

use of fireworks at, p. 3n.

Vikramānkadevacarita, date of, p. 155.

War, use of sling in, pp. 82, 83, 84, 85.

War animals and war vehicles, p. 63 f.

War-chariot, Sculptured relief of an Assyrian description of, p. 125n.

War-elephants, p. 68.

Warfare, Indian, and the use of cannon and gun - powder, p. 2.

Warfare methods adopted by Sultans of Gujarat, p. 68.

War Vehicles in India, p. 63 f.

Yakşarātri in the Kāmasūtra = Dīvālī, p. 228.

Yamadvitīyā, see Bhaubija

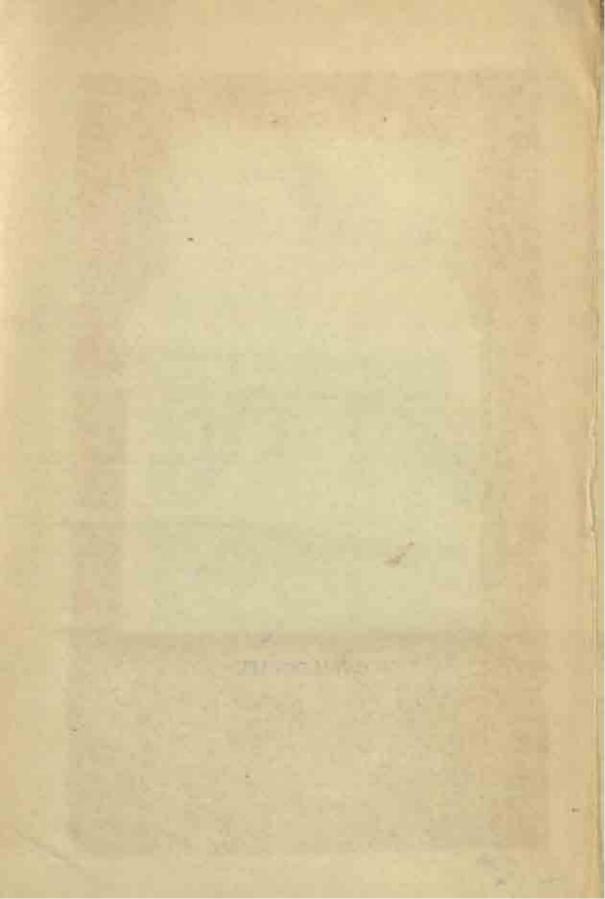
Yaksa, p. 255.

Yasastilakacampil, date of, p. 214.

" descr. of Divall in, p. 214 f.

Zodiac, Signs of the, date of the use in India of, p. 241n.

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